

beneficial in Jubbulpore and Bilaspur, but the prospects of the *kharif* crops are generally very good. Ground being ploughed for *rabi* sowings. Linseed sowing commencing in Chhattisgarh. Prices steady.

**Burma.**—*For week ending 28th September.*—There has been a fair fall of rain throughout Lower Burma, and agricultural prospects are good in all districts. In Upper Burma more rain is wanted in Shwebo; in other districts the fall is reported to have been sufficient and the crop prospect is fair. In Lower Burma the price of paddy has fallen slightly in Akyab, Thongwa, Thayetmyo, Amherst and Mergui, and risen slightly in Tharrawaddy and Henzada; in other districts the price is unchanged. In Upper Burma the price has risen slightly in Shwebo; in the other districts there are no fluctuations. The food supply is sufficient throughout the Province.

**Assam.**—*For week ending 2nd October.*—Weather seasonable. Rainfall light. Reaping of early and transplanting of late rice nearly over. Tea and other crops generally doing well.

**Mysore and Coorg.**—*For week ending 2nd October.*—Rain in the Civil and Military Station of Bangalore 5·38 inches. Rainfall good throughout the State. Condition of crops and prospects good. No material change in prices.

Rainfall 2·73 inches in Coorg. *Ragi* crops damaged by unseasonable rains; other crops in good condition.

**Berar and Hyderabad.**—*For week ending 2nd October.*—Average rainfall 1·10 inch in Berar. Weather warm and cloudy. Crops in good condition. Fodder sufficient. Prices of foodgrains stationary. Cattle free from disease.

Rainfall in Hyderabad during the week 3·4 inches. Total since 1st January 32·7 inches. *Abi* crops prospering. Harvesting of some *kharif* crops commenced. Prices stationary.

**Central India.**—*For week ending 2nd October.*—Rain slight and partial; more wanted in Bundelkhand, elsewhere sufficient. Crops generally good. Prices falling in Goona and parts of Bhopawar; steady elsewhere.

**Rajputana.**—*For week ending 2nd October.*—Slight rain in a few places. Standing crops slightly damaged by locusts in Meywar, Jeypore, and Marwar. Rain much needed in Kerowlee, Harowtee, Ulwar, and Sirohi. Agricultural stock good. Pasturage sufficient. Fodder dear in Marwar. Prices steady generally.

**Nepal.**—*For week ending 26th September.*—Unusually heavy rainfall during two days. No damage however to the ripening crops. Prospects remain very good.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXIII. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 8TH SEPTEMBER 1889.				WEEK ENDING 7TH SEPTEMBER 1889.				TOTAL RECEIPTS FROM 1ST APRIL TO 8TH SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 7TH SEPTEMBER 1889.		Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.				
			Total.	Per mile open.		Total.	Per mile open.								
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
State Lines worked by Companies.															
14th September 1889	East Indian (a)	1,326	6,77,583	444	1,526	6,97,728	457	1,84,98,207	527	1,89,29,603	540	4,31,096	...		
14th ditto	Patna-Gya.	57	7,448	131	57	7,475	131	1,53,878	140	1,88,233	143	4,355	...		
	Dildarnagar-Chazipur	...	(b)	...	...	(b)	...	...	...	(b)	...	...			
	Sindia	75	4,848	63	...	(c)	...	1,63,420	95	(c)	...	...	1,63,410		
14th September 1889	Rajputana-Malwa	1,064	3,13,944	204	1,072	2,34,000	139	78,27,246	205	86,85,593	218	8,57,047	...		
14th ditto	Bengal Nagpur (d)	186	17,507	94	305	(e) 21,007	71	6,17,374	163	(e) 8,02,000	117	1,05,280	...		
14th ditto	Southern Mahratta (f)	850	68,634	81	850	54,918	64	12,34,84	89	18,57,418	91	1,22,576	...		
14th ditto	Do. Mysore Section	140	10,871	78	290	17,418	89	2,40,436	75	3,32,016	64	99,180	...		
7th ditto	Indian Midland	130	7,927	58	749	(g) 41,475	56	73,20,372	102	(g) 12,18,304	82	8,98,232	...		
	Villupuram - Dharma- varan (Nellore Branch)	83	5,132	62	83	4,419	53	1,12,403	59	1,10,773	58	...	1,630		
7th ditto	Bareilly-Pilibhit	30	1,151	32	30	1,175	33	34,765	41	42,810	54	8,082	...		
	TOTAL	4,753	11,41,369	240	5,517	10,78,254	193	2,08,13,838	273	3,21,75,550	260	23,03,082	...		
State Lines worked by Government.															
14th September 1889	North Western (h)	2,462	5,20,510	231	4,306	4,78,627	201	1,06,52,336	189	1,18,21,035	217	11,68,739	...		
14th ditto	Oudh and Rohilkhand	622	1,03,341	150	532	91,204	130	30,02,310	122	34,37,601	210	3,75,351	...		
7th ditto	Bengal Central	123	20,370	163	123	15,370	123	3,28,015	47	3,11,702	109	31,724	...		
14th ditto	Wardha Coal	45	11,103	248	45	7,880	175	3,23,706	313	3,40,931	331	27,225	...		
7th ditto	Eastern Bengal	678	2,53,375	379	747	2,05,940	300	38,44,737	248	41,79,801	253	3,57,064	...		
14th ditto	Nalhati	27	1,250	47	27	1,234	68	43,931	70	43,181	76	...	...		
14th ditto	Tibhot	252	25,179	97	474	24,405	83	7,39,945	128	8,51,007	142	1,20,062	...		
14th ditto	Lucknow-Sitapur	...	...	...	...	...	...	...	...	...	...	...	...		
	Srinagan	105	4,183	40	105	4,234	40	1,13,246	47	1,39,262	62	30,016	...		
7th ditto	Junhat	25	1,451	58	25	1,570	62	27,050	47	28,181	49	1,126	...		
7th ditto	Cherra-Companyganj	7	242	35	7	305	44	2,037	13	3,117	11	1,000	...		
7th ditto	Burra (i)	392	41,123	105	333	70,435	131	12,71,121	143	19,00,135	181	6,07,017	...		
	TOTAL	4,519	10,32,493	214	4,935	9,70,019	125	2,05,50,100	184	2,31,08,084	204	27,32,984	...		
Lines worked by Guaranteed Companies.															
14th September 1889	Madras	840	1,80,510	190	840	1,58,062	182	37,57,703	194	40,97,423	213	3,45,660	...		
7th ditto	South Indian	534	1,10,134	169	534	1,14,012	170	24,92,125	400	29,10,423	173	3,18,164	...		
14th ditto	Great Indian Peninsula	1,497	(j) 5,40,534	391	1,430	(k) 3,90,730	271	1,90,85,002	543	1,44,80,540	433	...	45,92,336		
7th ditto	Bombay, Baroda and Central India (l)	461	2,22,125	483	461	1,55,000	336	55,01,514	519	57,36,381	544	2,34,561	...		
	TOTAL	3,452	10,32,929	299	3,335	8,19,310	241	3,08,31,808	368	2,69,30,843	317	...	37,00,065		
GRAND TOTAL (GUARANTEED AND STATE)															
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	4,24,67,725	142	4,29,70,041	137	5,46,319	...		
NET RECEIPTS		...	...	...	...	...	...	3,85,32,721	129	3,92,45,433	125	7,02,712	...		
Assisted Companies.															
14th September 1889	Tatalsewar	21	3,850	175	21	4,162	189	1,26,225	247	1,29,411	257	3,483	...		
31st August 1889	Dilnabad	...	...	...	...	(m)	...	(n) 1,82,254	110	(n) 2,10,357	120	27,003	...		
14th September 1889	Bengal and North- Western	376	28,194	75	376	26,670	71	10,97,164	126	11,62,401	133	65,240	...		
7th ditto	Rohilkhand-Kumaon	67	4,001	74	67	5,106	92	1,57,272	107	1,71,051	119	13,221	...		
	TOTAL	405	37,008	80	405	35,935	80	15,60,443	120	16,73,720	135	1,04,307	...		
Native States.															
14th September 1889	His Highness the Ni- gan's Guaranteed	310	33,153	107	354	41,803	118	7,13,461	109	9,88,827	122	2,75,436	...		
14th ditto	His Highness the Gaekwar's	59	1,927	33	59	2,260	38	59,327	44	59,434	44	107	...		
14th ditto	His Highness the Gaek- war's Verangan- Mehana-Vadnagar	21	759	36	27	650	24	20,092	43	24,962	40	3,970	...		
14th ditto	Bhavnagar-Cochin & a Junagadh Portbandar	209	14,000	71	209	15,846	61	4,12,226	99	6,00,812	103	1,94,585	...		
14th ditto	Mewar	62	2,410	35	68	2,741	40	83,671	54	98,009	60	9,428	...		
14th ditto	Jodhpore	124	4,349	34	124	5,100	41	1,53,448	50	1,54,009	53	...	8,639		
	TOTAL	791	52,404	233	813	68,163	77	14,79,125	86	16,24,193	94	4,45,068	...		

(a) Includes the Dildarnagar Chazipur State Railway.

(b) Included with East Indian Railway.

(c) Includes with Indian Midland Railway.

(d) Includes the Kailashnagar Branch.

(e) Includes the Santora Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Belaria-Katwa State Railway.

(g) Includes the Sindia and Bhopal-Narsi State Railways.

(h) Includes the Amritsar-Patankot and Rajpore-Bhatinda State Railways.

(i) Includes the Toungoo-Mandalay extension.

(j) Includes the Dhond-Mannad, Khamsan, Amraoti, and Bhopal-Narsi

State Railways.

(k) Includes the Dhond-Mannad, Khamsan, and Amraoti State Railways.

(l) Includes the Patni Branch.

(m) Return not received.

(n) Total receipts from 1st April to 1st September 1888.

(o) Total receipts from 1st April to 31st August 1889.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary

Sentin, 3rd October, 1889.

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# SUPPLEMENT TO The Gazette of India.

No. 41.} CALCUTTA, SATURDAY, OCTOBER 12, 1889.

## OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.

No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

### GOVERNMENT OF INDIA. PUBLIC WORKS DEPARTMENT. RAILWAY TRAFFIC.

#### RETURNS OF ACCIDENTS ON INDIAN RAILWAYS FOR THE FIRST QUARTER OF 1889.

No. 496 R. T., dated Simla, the 17th September, 1889.

RESOLUTION—By the Government of India, Public Works Department.

#### Read again—

Public Works Department Resolution	No. 840-R. T., dated 9th September 1884.
"	No. 810-R. T., dated 8th September 1885.
"	No. 902-R. T., dated 11th September 1886.
"	No. 1106-R. T., dated 19th September 1887.
"	No. 0102-R. T., dated 28th December 1888.
"	No. 298-R. T., dated 3rd July 1889.

#### Read also—

Director General of Railways' No. 157 (Statistical), dated the 23rd August 1889, forwarding the Abstract Returns of Accidents to Trains, &c., on the open lines of Railway in India for the quarter ended 31st March 1889.

**OBSERVATIONS.**—As compared with the average of the five\* corresponding previous quarters, the number of accidents to trains, rolling stock, permanent-way, &c., shows an increase of 42, or 6.59 per cent., with an increase of 1,977 miles, or 15.43 per cent. in the mean mileage open, and of 1,441,969 miles, or 12.24 per cent. in the train-mileage. The following are the Railways on which the more important fluctuations occurred:—

RAILWAY.	Number of accidents.	ACCIDENTS.				TRAIN-MILEAGE.	
		Increase.	Decrease.	Percentage of increase.	Percentage of decrease.	Percentage of increase.	Percentage of decrease.
Rajputana-Malwa	80	9	...	12.70	...	16.34	...
Bengal-Nagpur	24	13	...	118.18	...	30.20	...
Southern Mahratta	50	21	...	72.41	...	78.53	...
Indian Midland	26	19	...	271.43	...	462.17	...
North-Western	75	...	26	...	25.74	15.46	...
Great Indian Peninsula	61	45	...	32.61	...	5.71	...
Dibru-Sadiya	11	...	19	...	63.33	12.08	...
The Nizam's	28	9	...	100.00	...	47.62	...

\* Except where statistics for five quarters are not available for any line.



2. The increase of 9 accidents on the Rajputana-Malwa State Railway is chiefly attributable to 14 cases of "Failure of axles" having been reported against 4, and 16 cases of "Failure of couplings" against 10. There was a decrease of 3 accidents under "Trains or engines travelling in the wrong direction through points"; and of 3 under "Broken rails."

3. Of the increase of 13 accidents on the Bengal-Nagpur Railway, 5 were under "Goods trains or parts of Goods trains, engines, &c., leaving the rails" and 5 under "Trains running over cattle on the line."

4. On the Southern Mahratta Railway the number of accidents rose from 29 to 50 or 72.41 per cent., with an increase of 380.25 miles, or 80.05 per cent., in the mean mileage worked, and of 161,616 miles, or 78.53 per cent., in the train-mileage run. The increase chiefly occurred under "Trains running over cattle on the line" and "Trains running over obstructions on the line," the number recorded under the former being 26 against 16 and under the latter 6 against 1.

5. On the Indian Midland Railway, the number of accidents rose from 7 to 26 or 271.43 per cent.; the mean mileage worked increased by 352.75 miles, or 339.18 per cent.; and the train-mileage by 205,925 miles, or 462.17 per cent. The number chiefly increased under "Goods trains or part of Goods trains, engines, &c., leaving the rails," *viz.*, from 1 to 11.

6. Of the decrease of 26 accidents on the North-Western Railway, 6 appear under "Goods trains or parts of Goods trains, engines, &c., leaving the rails"; 7 under "Failure of couplings"; and 5 under "Fire in trains."

7. On the Great Indian Peninsula Railway, there was an increase of 16 accidents under "Fire in trains," and a decrease of 7 under "Goods trains, or parts of Goods trains, engines, &c., leaving the rails."

8. The decrease on the Dibru-Sadiya Railway mainly occurred under "Passenger trains or parts of Passenger trains leaving the rails," from 7 to 2; under "Trains running over cattle on the line," from 7 to 1; and under "Failure of couplings," from 6 to *nil*.

9. On His Highness the Nizam's Guaranteed State Railway, the only noticeable difference was an increase from 3 to 9 under "Trains running over cattle on the line."

10. The casualties resulting from accidents to trains, &c., were among passengers and others: 1 killed and 9 injured, against 1 killed and 18 injured; and among servants 2 killed and 8 injured, against 2 killed and 9 injured.

11. Of the casualties to passengers, 1 was killed and 4 were injured on the North-Western Railway in consequence of an up mixed train colliding with a ballast train at Kallūr Kot, due to the driver of the mixed train running into the station against signals and on to the line where the ballast train was standing. Three persons were slightly injured on the Great Indian Peninsula Railway by a down passenger train running into Nándgaon siding and colliding with a ballast train.

12. On the East Indian Railway when a pilot engine was returning to mile 130 for the balance of an up train, which had been left behind owing to the inability of the train engine to drag the load, it collided with the wagons which had not been protected by danger signals. Three railway servants were injured.

13. The following table exhibits the number of accidents under the different classes, due to accidents to trains, rolling stock, permanent-way, &c., and the number of persons killed and injured thereby, *vide* Tables Nos. 3 and 4:—

Serial No.	CAUSES OF ACCIDENTS.	Average of corresponding quarters of five previous years.*	FIRST QUARTER, 1889.				TOTAL ALL CLASSES.		
			No.	No. of passengers and others.		No. of Servants.		Killed.	Injured.
				Killed.	Injured.	Killed.	Injured.		
1	Collisions between passenger trains, or parts of passenger trains . . . . .	1	1	...	...	...	...	...	...
2	Collisions between passenger trains and goods, or mineral trains, engines and vehicles standing foul of the line . . . . .	10	9	1	7	...	2	1	9
3	Collisions between goods trains, or parts of goods trains . . . . .	19	22	...	...	...	3	...	3
4	Collisions between light engines . . . . .	...	1	...	...	...	...	...	...

\* Except where statistics for five quarters are not available for any line.

Serial No.	CAUSES OF ACCIDENTS.	Average of corresponding quarters of five previous years.*	FIRST QUARTER, 1889.				TOTAL ALL CLASSES.	
			No.	No. of passengers and others.		No. of Servants.		
				Killed.	Injured.	Killed.	Injured.	
5	Passenger trains, or parts of passenger trains leaving the rails . . . . .	26	13	...	...	...	...	...
6	Goods trains or parts of goods trains, engines, &c., leaving the rails . . . . .	70	77	...	...	...	1	1
7	Trains or engines travelling in the wrong direction through points . . . . .	14	12	...	...	...	...	...
8	Trains running into stations or sidings at too high a speed . . . . .	3	3	...	...	...	...	...
9	Trains running over cattle on the line . . . . .	228	229	...	...	...	...	...
10	" over obstructions on the line . . . . .	26	43	...	1	...	...	1
11	" through gates at level crossings . . . . .	11	14	...	...	...	...	...
12	The bursting of boilers of engines . . . . .	18	20	...	...	...	...	...
12(a)	" of tubes, &c., of engines . . . . .			...	...	...	...	...
13	The failure of machinery, springs, &c., of engines . . . . .	49	45	...	...	...	...	...
14	" of tyres . . . . .	1	1	...	...	...	...	...
15	" wheels . . . . .	...	3	...	...	...	...	...
16	" axles . . . . .	6	21	...	...	...	...	...
17	" brake apparatus . . . . .	...	2	...	...	...	...	...
18	" couplings . . . . .	37	29	...	...	...	...	...
19	" tunnels, bridges, viaducts, culverts, &c. . . . .	...	...	...	...	...	...	...
20	Broken rails . . . . .	5	9	...	...	...	...	...
21	The flooding of portions of permanent-way . . . . .	1	2	...	...	...	...	...
22	Slips in cuttings or embankments . . . . .	1	2	...	...	...	...	...
23	Fire in trains . . . . .	57	64	...	...	...	...	...
24	Fire at stations, or involving injury to bridges or viaducts . . . . .	8	15	...	...	1	...	1
25	Other accidents . . . . .	46	42	...	1	1	2	3
1889 . . . . .			679	1	9	2	8	3
Total average of corresponding quarters of five previous years* . . . . .			637	1	18	2	9	27

\* Except where statistics for five quarters are not available for any line.

14. The principal variations occurred under "Passenger trains, or parts of passenger trains, leaving the rails," 13 against 26; "Trains running over obstructions on the line," 43 against 26; "Failure of axles," 21 against 6; and "Failure of couplings," 29 against 37.

15. The decrease under "Passenger trains, or parts of passenger trains leaving the rails" was chiefly due to the number of accidents recorded on the Jorhat and Dibru-Sadiya Railways, being 3 against 4 and 2 against 7, respectively.

16. Of the 77 cases of "Goods trains or parts of Goods trains, engines, &c., leaving the rails," 11 occurred on the Indian Midland Railway and the same number on the Madras Railway; 8 on the Jorhat State Railway and a similar number on the Dibru-Sadiya Railway; 7 on the Eastern Bengal State Railway; 6 on the East Indian; and 6 on the Bengal-Nagpur Railway.

17. Of the 229 cases of "Trains running over cattle on the line," 44 occurred on the Eastern Bengal State Railway; 27 on the Rajputana-Malwa State Railway; 26 on the Southern Mahratta Railway; 23 on the North-Western Railway; and 16, 15 and 14, respectively, on the South Indian, Madras, and East Indian Railways.

18. The increase under "Trains running over obstructions on the line" occurred mainly on the Rajputana-Malwa, Southern Mahratta, Oudh and Rohilkhand, Eastern Bengal, and South Indian Railways.

19. Of the 45 cases of "Failure of machinery, springs, &c., of engines," 12 occurred on the North-Western Railway; 6 on the South Indian Railway; 5 on the Rajputana-Malwa; and 5 on the Southern Mahratta Railway.

20. On the Rajputana-Malwa State Railway there were 14 cases of "Failure of axles" out of a total of 21.

21. The decrease of 8 accidents under "Failure of couplings" was mainly due to decreases on the North-Western, Eastern Bengal, and Dibru-Sadiya Railways.

22. The number of cases of "Fire in trains" was the largest on the Great Indian Peninsula Railway, *vis.*, 32 out of a total of 64.

23. Of the 42 accidents classified as "Other accidents," 23 have been returned by the Bombay, Baroda and Central India Railway.

24. The casualties to passengers from causes other than accidents to trains, &c., *vide* Table No. 2, were —

CAUSES OF ACCIDENT.	FIRST QUARTER, 1889.		AVERAGE OF CORRESPONDING QUARTERS OF FIVE PREVIOUS YEARS.*	
	Killed.	Injured.	Killed.	Injured.
From falling between carriages and platforms	...	4	1	2
Falling on to the platform, ballast, &c., when getting into or out of trains	2	2	2	3
Whilst crossing the line at stations	2	...	1	...
Falling out of carriages during the travelling of trains	3	19	2	14
Other accidents	1	10	3	5
TOTAL	8	35	9	24

\* Except where statistics for five quarters are not available for any line.

25. The accidents to servants in the employ of Railways or of Contractors, whilst performing duties connected directly with the transit of passengers and goods, from causes other than accidents to trains, &c., were as follows, *vide* Table No. 2:—

CAUSES OF ACCIDENTS.	FIRST QUARTER, 1889.		AVERAGE OF CORRESPONDING QUARTERS OF FIVE PREVIOUS YEARS.*	
	Killed.	Injured.	Killed.	Injured.
During shunting operations	8	11	7	11
Falling of engines, vans, wagons, &c.	...	11	2	11
Coming in contact with over-bridges, &c., during the travelling of trains	...	1	...	2
Coming in contact, while shunting, with vehicles, &c., standing in adjoining lines	2	...	1	1
Getting on or off trains, engines, &c.	1	7	4	10
Whilst loading, unloading or sheeting	...	22	2	17
Whilst breaking, spragging, or choking wheels	...	3	...	2
Whilst working at cranes or capstans	...	5	...	3
Whilst working on the permanent-way or in sidings	...	6	2	6
Whilst walking along the line on the way home, or to work	1	...	1	1
Whilst walking, crossing, or standing on the line	6	8	6	5
Whilst passing between vehicles	1	1	1	2
Whilst attending to the machinery of engines, cleaning them, &c.	...	5	1	5
Whilst attending to gates at level crossings	1	1	...	2
Falling or being caught between vehicles and platforms	...	3	1	1
Falling of ladders, scaffolds, platforms, &c.	1	6	1	3
By falling of lamps, wagon doors, timber, weights, &c.	...	16	1	6
Whilst coupling or uncoupling wagons	2	9	1	7
Miscellaneous	5	35	4	26
TOTAL	25	150	35	121

\* Except where statistics for five quarters are not available for any line.

26. Of other persons killed and injured by running trains, &c., 3 were killed and 5 injured, whilst passing over the line at level crossings; 34 were killed and 15 injured, whilst trespassing on the line; 11 committed suicide, and 7 were killed and 1 was injured from miscellaneous causes.

27. The following table exhibits the total number of persons killed and injured from all causes on the whole Indian Railway system, as compared



with the average of the corresponding quarters of five previous years, *vide* Table No. 1 :—

CAUSES OF ACCIDENTS.	FIRST QUARTER, 1889.		AVERAGE OF CORRE- SPONDING QUARTERS OF FIVE PREVIOUS YEARS.*	
	Killed.	Injured.	Killed.	Injured.
<i>Passengers.</i>				
From causes beyond their own control . . . .	1	11	1	20
From misconduct or want of caution . . . .	8	32	8	21
<i>Servants.</i>				
From causes beyond their own control . . . .	9	30	5	13
From misconduct or want of caution . . . .	21	128	33	119
<i>Others.</i>				
Whilst passing at level crossings . . . .	3	5	1	1
Trespassers including suicides . . . .	45	15	36	10
Other persons . . . .	7	1	2	2
TOTAL . . . .	94	222	86	185
TOTAL OPEN MILEAGE . . . .	14,792		12,815	
TOTAL TRAIN-MILEAGE . . . .	13,224,461		11,782,492	

\* Except where statistics for five quarters are not available for any line.

28. In addition to the above, 4 persons are reported to have been killed and 40 injured in yards, workshops, &c., and 160 persons to have died in carriages and at stations from causes unconnected with the working of trains.

**RESOLUTION.**—The large number of failures of axles on the Rajputana-Malwa Railway again attracts notice, 14 cases having occurred during the quarter under review. Failures of couplings on the Rajputana-Malwa Railway take a large proportion, the failures being 16 in a total for all Railways of 29.

The Government of India also observes that, in the cases of "Fire in trains," the large number of 32, or one-half, is recorded as having occurred on the Great Indian Peninsula Railway, out of a total of 64 for all Railways.

Cases of trains running over obstructions on the line have increased considerably, the number reported for the quarter being 43 against an average of 26 in the corresponding quarter of five previous years. The increases are mainly on the Rajputana-Malwa, Southern Mahratta, Oudh and Rohilkhand, Eastern Bengal and South Indian Railways.

The decrease in the total number of accidents on the North-Western and on the Dibru-Sadiya Railways is satisfactory.

**ORDER.**—Ordered that this Resolution be communicated, for information,

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab.

The Chief Commissioners of the Central Provinces, Burma, and Assam.

The Resident at Hyderabad.

The Agents to the Governor General for Central India, Rajputana and Baluchistan.

The Director General of Railways.

The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Central Division.

to the Local Govern-

ments, Administra-

tions and Officers

noted in the margin.

Ordered also that copies be forwarded for the information of Her Majesty's Government.

Ordered further that this Resolution, with the Abstract Returns, be published in the Supplement to the *Gazette of India*.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

*Documents accompanying.*

Abstract Returns of Accidents for the first quarter of 1889.







TABLE No. 1.—continued.  
GENERAL TOTAL.  
Number of Persons reported during the First Quarter of 1889 as Killed or Injured on the several Railways open for Traffic in India, &c.—continued.

Miles opened.	RAILWAYS.	PASSENGERS.				RAILWAY SERVANTS OR SERVANTS OF CONTRACTORS.				OTHER PERSONS.				TOTAL after Claims.	
		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Total.		From Causes beyond their own Control.		From their own Misconduct or want of Caution.		Total.			
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.		
(a) { 91 91 }	ASSISTED COMPANIES—continued.	Sohilkhand-Kanoun		{ Average for 4 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		{ Thaton-Dnyinsak		{ Average for 2 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		8		8		...	...	...	...	...	...	...	...	...	...
		8		8		...	...	...	...	...	...	...	...	...	...
1691 (4) 334	NATIVE STATES.	Pondicherry		{ Average for 5 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		{ H. H. the Nizam's Guaranteed		{ Average for 5 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		{ H. H. the Gackwar's		{ Average for 5 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		{ Bhavnagar-Gondal Junagarh- Porbandar.		{ Average for 5 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
80 68 654 124	Jodhpore	{ Morri		{ Average for 2 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		{ Jodhpore		{ Average for 5 correspond- ing previous quarters. 1889		...	...	...	...	...	...	...	...	...	...
		80		68		...	...	...	...	...	...	...	...	...	...
		654		124		...	...	...	...	...	...	...	...	...	...
12,816 14,792	TOTAL	{ TOTAL		{ Average for 5 correspond- ing previous quarters(c). 1889		1	20	5	13	33	119	39	132	185	

(a) Includes the Barilly-Pilibhit State Railway.

(b) Includes the Deccan Express.

(c) Except where otherwise the first quarter is not available for any line.

TABLE No. 2.



TABLE

NUMBER of PERSONS reported during the First Quarter of 1889 as KILLED or INJURED on all RAILWAYS open for practicable, the Nature and Causes of the

Serial Number.		RAILWAYS.		PASSENGERS.																				Total Passengers.		From accidents to trains, &c. See Table No. 4.		From accidents to trains, &c. See Table No. 4.		1. During shunting operations.		2. Pulling off engine, road, wagon, &c.		3. Coming in contact with over-bridges, &c., during the travelling of trains.		4. Coming in contact, while alighting, with vehicles, &c., standing in adjoining lines.		5. Getting on or off trains, engines, &c.		6. Whilst loading, unloading, or shunting.	
				FROM CAUSES OTHER THAN ACCIDENTS TO TRAINS, &c.																																					
				From accidents to trains, &c. See Table No. 4.		1. From falling between carriages and platform.		2. From falling on to the platform, ballast, &c., when getting into or out of trains.		3. Whilst crossing the line at stations.		4. By closing of carriage doors.		5. Falling out of carriages during the travelling of trains.		6. Other accidents.		Total.		Killed.		Injured.																			
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.														
STATE IMPERIAL.																																									
1	East Indian (a) ...	...	...	...	1	1	...	1	...	...	1	1	1	4	3	4	...	3	...	3	...	...	...	...	...	...	...	...													
2	Rajputana-Malwa (b) ...	...	...	...	...	...	...	...	...	1	4	...	4	1	8	1	8	...	1	...	...	...	...	...	...	...	...	...													
3	Bombay-Nagpur (c) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
4	Southern Mahratta (d) ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...													
5	Ditto Mysore Section	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
6	Indian Midland (e) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
7	North Western (f) ...	...	1	4	...	...	...	...	...	...	...	...	...	...	1	10	...	1	1	2	...	1	...	...	...	...	1	...													
8	Oodh and Rohilkhand (g) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	1	...	...	...	...	...	...	...	...	...													
9	Wardha Coal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...													
STATE PROVINCIAL.																																									
10	Eastern Bengal (A) ...	...	...	...	...	2	...	...	...	...	...	...	...	2	...	2	...	1	...	1	...	1	...	...	...	...	...	...													
11	Nalhati ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
12	Tirhoot ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
13	Lucknow-Sitapur-Sirhind	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...													
14	Jorhat ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
15	Cherra-Companyganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
16	Burma (i) ...	...	...	...	2	1	...	...	...	...	...	...	...	1	2	1	2	...	1	...	...	...	...	...	...	...	1	...													
GUARANTEED COMPANIES.																																									
17	Madras ...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...													
18	South Indian (j) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	...	...	1	...	...	...	...	...	...	...													
19	Great Indian Peninsula (k) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	3	...	...	...	...	...	...													
20	Bombay, Baroda and Central India (l) ...	...	1	...	...	...	...	...	...	...	...	1	8	...	4	...	6	...	1	...	...	...	...	...	...	...	...	...													
ASSISTED COMPANIES.																																									
21	Darjeeling-Himalayan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
22	Deoghar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
23	Dibru-Sadiya ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
24	Bengal and North-Western ...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	1	1	...	1	...	...	...	...	...	...													
25	Rohilkhand-Kumaon (m) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
26	Thakur-Buyinziak ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
FOREIGN.																																									
27	Pondicherry ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
28	West of India Portuguese ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
NATIVE STATES.																																									
29	H. H. the Nizam's Guaranteed (a) ...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	...													
30	H. H. the Gaekwar's ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
31	Blairnagar-Gondal-Jundgarh-Porbandar.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...													
32	Morvi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
33	Jodhpore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...													
TOTAL ...		1889...		1	8	4	2	2	...	...	...	3	19	1	10	8	35	0	43	2	8	8	11	...	11	...	1	2	...	1	7	...									
		Average for 5 corresponding previous quarters (a)...		16	1	2	2	3	1	...	...	...	2	14	3	5	9	24	9	40	3	11	7	11	2	11	...	2	1	1	4	10	2								

(a) Includes the Rajahmundry, Biddarwar, Channarayana and Tarsakwar Railways for three months; and the Andhra State Railway for two months.

(b) Includes H. H. the Gaekwar's Virpuram-Mehsana-Vadnagar State Railway.

(c) Includes the Rajahmundry Branch.

(d) Includes the Rajahmundry Branch.

(e) Includes the Bhagalpur State Railway for three months; and the Andhra State Railway for one month.

(f) Includes the Aurangabad-Patankot and Rajpur-Mahinda State Railway.

(g) Includes the Rajahmundry Branch.

## No. 2.

**Traffic in INDIA, distinguishing between PASSENGERS, RAILWAY SERVANTS, and OTHER PERSONS, and classifying, as far as Accidents occasioning the Death or Injury.**

[illegible]

(d) Includes the Villupuram-Thiruvananthapuram State Railway, Nellore Branch, and Pondicherry Railway.

(d) Includes the Fair Branch.  
(e) Includes the Bareilly-Pilibhit State Railway.  
(f) Includes the Dehraun Extension.  
(g) Except where indicated for the quarters are not available for any line.

TABLE No. 3.

Accidents to Trains, Rolling-stock, Permanent-way, &c., reported during the First Quarter of 1889 as having occurred on the several Railways open for Traffic in India, distinguishing the different Classes of Accidents and the Number of Passengers and Others, and of Railway Servants Killed or Injured in each Class of Accident.

SEE ALSO TABLE No. 4.  
STATE IMPERIAL.

	EAST INDIA (a).				RAJASTHAN-MAWLA (b).				BENGAL-NAGPUR (c).				SOUTHERN MARATHA MOUNTAIN SERVICE.			
	Number of Passengers and others.		Number of Railway Servants.		Number of Passengers and others.		Number of Railway Servants.		Number of Passengers and others.		Number of Railway Servants.		Number of Passengers and others.		Number of Railway Servants.	
	No.	Killed.	Injured.	Total all Classes.	No.	Killed.	Injured.	Total all Classes.	No.	Killed.	Injured.	Total all Classes.	No.	Killed.	Injured.	Total all Classes.
1. Collisions between passenger trains, or parts of passenger trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines and vehicles standing foul of the line ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains, or parts of goods trains ...	6	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Collisions between light engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Passenger trains, or parts of passenger trains, leaving the rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Goods trains, or parts of goods trains, engines, &c., leaving the rails ...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Trains running over cattle on the line ...	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line ...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Ditto through gates at level-crossings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12. The bursting of boilers of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, &c., of engines ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14. Ditto of tyres ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, &c. ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25. Other accidents ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL ALL CLASSES</b>	<b>31</b>	<b>1*</b>	<b>3</b>	<b>268,100,045</b>	<b>80</b>	<b>...</b>	<b>...</b>	<b>1,648,869</b>	<b>24</b>	<b>...</b>	<b>...</b>	<b>7,265,123</b>	<b>50</b>	<b>...</b>	<b>...</b>	<b>28,795,828</b>
Number of passenger miles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of servants employed ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Train-mileage of all descriptions ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL ALL CLASSES</b>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

\* Not a passenger, but a cart man was injured on the Sindh State Railway.

(a) Includes the Patna-Gya, Dildarganj-Achhabpur and Tarrakwar Railways for three months; and the Sindh State Railway for two months.

(b) Includes H. H. the Gaekwar's Virdhavan, Maheshwar-Vadgaon State Railway.

(c) Includes the Kankinimaria Branch.

(d) Includes the Railway, Kankinimaria Branch.

(e) Includes the Railway, Kankinimaria Branch.





TABLE No. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &amp;c., reported during the First Quarter of 1889, &amp;c.—continued.

SEE ALSO TABLE NO. 4. STATE PROVINCIAL—Continued																																			
Nalwa'n.										Tikroor.						Lucknow-Straor-Straor-Way.						Jorhat.						General-Contingent.							
No.			Number of Passengers and others.			Number of Servants.			Total all Classes.			No.			Number of Passengers and others.			Number of Servants.			Total all Classes.			No.			Number of Passengers and others.			Number of Servants.			Total all Classes.		
Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.		Killed.	Injured.				
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...																

SEE ALSO TABLE NO. 4.

STATE PROVISIONS—continued.

TABLE No. 4.

[illegible]

(c) Include the Transumbly Extension.

(b) Includes the Villupuram-Dharmavaram State Railway, Nellore Branch, and Pondicherry Railway.

(c) Includes the Hybrid-Manned, Automatic and Kharungzoo State Railways.

(1) Includes the Pat. Bruch.







TABLE NO. 3.—ACCIDENTS TO TRAINS, ROLLING-STOCK, PERMANENT-WAY, &amp;c., reported during the First Quarter of 1889, &amp;c.—continued.

	NATIVE STATES—continued.										TOTAL OF ALL RAILWAYS.									
	BENGALEE GOVT.—TUGAHEK POREWALL.					MYSR.					JODHPUR.					Number of Passengers and others.				
	Number of Passengers and others.		Number of Servants.		Total all Classes.	Number of Passengers and others.		Number of Servants.		Total all Classes.	Number of Passengers and others.		Number of Servants.		Total all Classes.	Number of Passengers and others.		Number of Servants.		Total all Classes.
	Killed.	Injured.	Killed.	Injured.		Killed.	Injured.	Killed.	Injured.		Killed.	Injured.	Killed.	Injured.		Killed.	Injured.	Killed.	Injured.	
1. Collisions between passenger trains, or parts of passenger trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Collisions between goods trains, or parts of goods trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4. Collisions between light engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Passenger trains, or parts of passenger trains, leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Goods trains, or parts of goods trains, engines, &c., leaving the rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Trains or engines travelling in the wrong direction through points	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8. Trains running into stations or sidings at too high a speed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9. Trains running over cattle on the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10. Ditto over obstructions on the line	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. Ditto through gates at level-crossings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12. The bursting of boilers of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12(a). Ditto of tubes, &c., of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, &c., of engines	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14. Ditto of tyres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. Ditto of brake apparatus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19. Ditto of tunnels, bridges, viaducts, culverts, &c.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23. Fire in trains	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24. Fire at stations, or involving injury to bridges or viaducts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25. Other accidents	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL ALL CLASSES</b>	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of passenger miles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
" of Servants employed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Train mileage of all descriptions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	11,948,016		745			1,260,767		210			3,470,503		383			1,152,325,131		156,067		
	153,826					18,594					22,497					18,324,461				

(a) Not a passenger, see note \* under East Indian Railway.

(b) One was not a passenger, see note (a).



TABLE No. 4.





**GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.**

## RETAIL PRICES FOR THE 2nd HALF OF AUGUST 1880.

QUANTITIES PER RUPEE IN SER\$ OF & TOLAS.

[illegible]



[illegible]

RETAIL PRICES FOR THE 2ND HALF OF AUGUST 1989—continued.

QUANTITIES PER RUPEE IN SERFS OF 80 TOLAS.[illegible]

[illegible]

Six piés per bundle.

↑ For baked grain.





Central Provinces—														
Western—														
Nimar	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8
Rhandwa-Asirgarh Cant.	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8
Hoshangabad	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7	14 7
Rebil	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3	15 3
Chhindwara	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4
Nagpur	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0
Wardha	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0
Central—														
Nonsiarpur	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8
Saugor	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0
Damoh	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2	14 2
Jabalpore	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0
Mandla	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0	17 0
Seoni	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15	17 15
Hilichat	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1
Rhandra	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4	16 4
Chanda	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5	14 5
Eastern—														
Bilaspur	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11	16 11
Rajpur	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11	19 11
Sambalpur	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4	12 4
Berar—														
Buldana	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
Bastin	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3	17 3
Akola	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0
Ellichpur	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0
Anruti	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0	14 0
Wan	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8	14 8
Nizam's Territories—														
Secunderabad	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11	12 11
Bolaram	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8
Chadarghat	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0	11 0

that Firwood is sold by head-loads, cart-loads, and bullock-loads,

† Not present.

Not produced.

Not sold.

## RETAIL PRICES FOR THE 2ND HALF OF AUGUST 1889—continued.

QUANTITIES PER RUPEE IN SEER OF 80 TOLAS.

Districts.	WHEAT.		BARLEY.		RICE, RUST SORT.		RICE, COMMON.		JOWAR OR CHOLAM (Sorghum vulgare).		BAJRA OR GURRU (Pennisetum typhoides).		MAHUA OR RAGI (Eleusine coracana).		KANGNI OR ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADAIAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR, OR TURK, CADIAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
<b>Madras—</b>																										
Malabar Coast—																										
Malabar . . . . .	8 10	8 10	8 2	8 2	11 13	12 13	12 10	12 10	8	8	8	8	20 6	20 6	20 6	19 5	10 8	10 8	10 8	10 8	10 8	10 8	136 2	136 2	11 11	11 11
S. Canara . . . . .	8 2	8 2	8 2	8 2	10 10	10 10	11 5	11 5	8	8	8	8	19 5	19 5	19 5	19 5	10 8	10 8	10 8	10 8	10 8	138 13	138 13	12 5	12 5	
<b>South, central—</b>																										
Coimbatore . . . . .	11 8	11 8	11 8	11 8	12 3	12 3	13 3	13 3	21 11	21 11	21 11	21 11	25 3	25 3	25 3	25 3	13 10	13 10	13 10	13 10	13 10	133 10	133 10	12 11	12 11	
Nilgiris . . . . .	10 11	10 11	10 11	10 11	9 10	9 10	10 6	10 6	20 0	20 0	20 0	20 0	20 3	20 3	20 3	20 3	10 13	10 13	10 13	10 13	10 13	161 13	161 13	10 2	10 2	
Salem . . . . .	10 13	10 13	10 13	10 13	11 13	11 13	13 3	13 3	29 3	29 3	29 3	29 3	30 13	30 13	30 13	30 13	186 10	186 10	186 10	186 10	186 10	186 10	186 10	13 8	13 8	
<b>Central—</b>																										
Bellary . . . . .	13 6	13 6	13 6	13 6	12 3	12 3	13 8	13 8	28 10	28 10	28 10	28 10	33 0	33 0	33 0	33 0	97 3	97 3	97 3	97 3	97 3	97 3	97 3	15 14	15 14	
Anantapur . . . . .	11 8	11 8	11 8	11 8	12 13	12 13	14 0	14 0	31 6	31 6	31 6	31 6	32 0	32 0	32 0	32 0	104 6	104 6	104 6	104 6	104 6	104 6	11 5	11 5		
Cuddapah . . . . .	12 8	12 8	12 8	12 8	11 10	11 10	12 8	12 8	23 11	23 11	23 11	23 11	31 8	31 8	31 8	31 8	140 0	140 0	140 0	140 0	140 0	140 0	12 2	12 2		
Kurnool . . . . .	11 6	11 6	11 6	11 6	10 11	10 11	11 6	11 6	25 11	25 11	25 11	25 11	21 5	21 5	21 5	21 5	142 14	142 14	142 14	142 14	142 14	142 14	11 11	11 11		
<b>East Coast, north—</b>																										
Ganjam . . . . .	7 2	7 2	6 3	6 3	9 8	9 8	10 0	10 0	22 0	22 0	22 0	22 0	15 6	15 6	15 6	15 6	167 11	167 11	167 11	167 11	167 11	167 11	12 5	12 5		
Vizagapatnam . . . . .	11 8	11 8	12 0	12 0	9 8	9 8	11 5	11 5	22 2	22 2	22 2	22 2	22 3	22 3	22 3	22 3	116 10	116 10	116 10	116 10	116 10	116 10	11 11	11 11		
Godavari . . . . .	10 6	10 6	10 6	10 6	14 6	14 6	15 0	15 0	24 0	24 0	24 0	24 0	23 11	23 11	23 11	23 11	243 0	243 0	243 0	243 0	243 0	243 0	12 0	12 0		
<b>East Coast, central—</b>																										
Kistna . . . . .	10 6	10 6	10 6	10 6	11 8	11 8	12 2	12 2	19 0	19 0	19 0	19 0	23 13	23 13	23 13	23 13	170 2	170 2	170 2	170 2	170 2	170 2	13 3	13 3		
Nellore . . . . .	11 0	11 0	10 10	10 10	12 11	12 11	13 3	13 3	22 11	22 11	22 11	22 11	27 13	27 13	27 13	27 13	93 5	93 5	93 5	93 5	93 5	93 5	12 13	12 13		
<b>East Coast, south—</b>																										
Madras . . . . .	10 13	10 13	10 13	10 13	11 13	11 13	12 13	12 13	16 6	16 6	16 6	16 6	26 6	26 6	26 6	26 6	99 10	99 10	99 10	99 10	99 10	99 10	12 5	12 5		
Chingleput . . . . .	9 6	9 6	9 6	9 6	12 11	12 11	13 3	13 3	20 3	20 3	20 3	20 3	24 11	24 11	24 11	24 11	122 8	122 8	122 8	122 8	122 8	122 8	12 6	12 6		
N. Arcot . . . . .	8 10	8 10	8 10	8 10	12 3	12 3	13 3	13 3	20 3	20 3	20 3	20 3	23 2	23 2	23 2	23 2	194 6	194 6	194 6	194 6	194 6	194 6	11 5	11 5		
S. Arcot . . . . .	8 13	8 13	8 13	8 13	13 11	13 11	14 0	14 0	20 3	20 3	20 3	20 3	23 6	23 6	23 6	23 6	209 0	209 0	209 0	209 0	209 0	209 0	11 11	11 11		
Tanjore . . . . .	8 14	8 14	8 14	8 14	12 3	12 3	12 11	12 11	22 6	22 6	22 6	22 6	27 3	27 3	27 3	27 3	166 3	166 3	166 3	166 3	166 3	166 3	12 6	12 6		
Trichinopoly . . . . .	8 14	8 14	8 14	8 14	12 3	12 3	12 11	12 11	22 6	22 6	22 6	22 6	27 3	27 3	27 3	27 3	143 6	143 6	143 6	143 6	143 6	143 6	12 5	12 5		
<b>Southern—</b>																										
Tinnevely . . . . .	8 8	8 8	9 3	9 3	11 2	11 2	12 0	12 0	24 5	24 5	24 5	24 5	24 13	24 13	24 13	24 13	53 5	53 5	53 5	53 5	53 5	53 5	14 6	14 6		
Madurai . . . . .	10 2	10 2	10 13	10 13	12 10	12 10	13 2	13 2	24 5	24 5	24 5	24 5	24 13	24 13	24 13	24 13	140 14	140 14	140 14	140 14	140 14	140 14	13 10	13 10		
<b>Mysore—</b>																										
Mysore . . . . .	10 0	10 0	10 0	10 0	9 4	9 4	10 4	10 4	27 8	27 8	27 8	27 8	30 0	30 0	30 0	30 0	84 0	84 0	84 0	84 0	84 0	84 0	9 0	9 0		
Bangalore . . . . .	10 8	10 8	10 8	10 8	10 8	10 8	10 8	10 8	21 0	21 0	21 0	21 0	33 0	33 0	33 0	33 0	84 0	84 0	84 0	84 0	84 0	84 0	9 4	9 4		
Kolar . . . . .	11 0	11 0	11 0	11 0	10 0	10 0	10 8	10 8	21 0	21 0	21 0	21 0	43 0	43 0	43 0	43 0	144 0	144 0	144 0	144 0	144 0	144 0	9 0	9 0		
Tumkur . . . . .	11 0	11 0	11 0	11 0	10 8	10 8	11 8	11 8	21 0	21 0	21 0	21 0	40 0	40 0	40 0	40 0	340 0	340 0	340 0	340 0	340 0	340 0	9 0	9 0		
Hasan . . . . .	10 0	10 0	10 0	10 0	11 0	11 0	12 0	12 0	21 0	21 0	21 0	21 0	40 0	40 0	40 0	40 0	340 0	340 0	340 0	340 0	340 0	340 0	9 0	9 0		
Kadur . . . . .	10 0	10 0	10 0	10 0	12 0	12 0	13 0	13 0	21 0	21 0	21 0	21 0	40 0	40 0	40 0	40 0	340 0	340 0	340 0	340 0	340 0	340 0	9 0	9 0		
Shimoga . . . . .	11 9	11 9	12 10	12 10	10 8	10 8	11 11	11 11	31 8	31 8	31 8	31 8	39 14	39 14	39 14	39 14	480 0	480 0	480 0	480 0	480 0	480 0	8 6	8 6		
Chitaldrug . . . . .	12 0	12 0	14 0	14 0	10 0	10 0	11 0	11 0	32 0	32 0	32 0	32 0	48 0	48 0	48 0	48 0	320 0	320 0	320 0	320 0	320 0	320 0	9 0	9 0		
<b>Coorg—</b>																										
Coorg . . . . .	9 0	9 0	8 0	8 0	10 8	10 8	12 8	12 8	21 0	21 0	21 0	21 0	35 8	35 8	35 8	35 8	110 0	110 0	110 0	110 0	110 0	110 0	8 0	8 0		
<b>Aden</b> . . . . .	8 0	8 0	8 0	8 0	6 3	6 3	8 0	8 0	10 3	10 3	10 3	10 3	9 4	9 4	9 4	9 4	65 5	65 5	65 5	65 5	65 5	65 5	32 0	32 0		

\* Not sold.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

ABSTRACT SHOWING THE RESULT OF EMIGRATION FROM THE PORT OF CALCUTTA DURING THE MONTH OF  
AUGUST, 1889.

*No. I.—As to Age and Sex.*

	DEMERARA.				TRINIDAD.				MAURITIUS.				SURINAM.				TOTAL.		Grand Total.
	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	
Under 2 years	15	8	23		16	10	26		5	1	6		25	19	44		59	44	103
From 2 to 10 years	34	33	67		28	27	55		9	7	16		62	40	102		143	107	250
" 10 " 20 "	32	12	44		42	17	59		43	4	47		39	17	56		156	50	206
" 20 " 30 "	350	99	449		300	109	409		237	55	292		214	66	280		1,010	315	1,325
" 30 " 40 "	44	23	67		48	19	67		74	17	91		123	71	194		289	120	409
" 40 " 50 "	...	...	...		2	1	3		2	2	4		3	4	7		7	7	14
Above 50 years	...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
GRAND TOTAL	384	158	542	34.91 women to every 100 men.	446	189	635	37.24 women to every 100 men.	368	86	454	23.91 women to every 100 men.	466	211	677	40.10 women to every 100 men.	1,664	644	2,308

*No. II.—As to places whence Emigrants came to Calcutta for embarkation.*

	DEMERARA.			TRINIDAD.			MAURITIUS.			SURINAM.			TOTAL.		Grand Total.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	
Orissa	...	...	...	1	1	2	1	...	1	1	...	1	3	1	4
Western Bengal	7	3	10	7	5	12	2	2	4	30	31	61	34	39	91
Central ditto	...	...	...	1	...	1	1	...	1	5	2	7	7	2	9
Eastern ditto	...	...	...	1	...	1	1	...	1	...	...	...	2	...	2
Behar	63	35	98	80	24	104	162	43	205	278	131	409	583	233	1,051
North-Western Provinces	219	92	311	274	137	411	147	33	180	112	37	149	732	299	1,051
Oudh	83	28	111	76	17	93	46	7	53	30	8	38	235	60	295
Central India	8	2	10	2	2	4	1	1	2	5	...	5	16	5	21
Punjab	4	...	4	2	2	4	...	...	...	1	...	1	7	2	9
Nepal and Native States	...	...	...	2	...	2	1	...	1	3	2	5	6	2	8
Mixed, Bombay and Madras	...	...	...	...	1	1	...	...	...	1	...	1	1	1	2
GRAND TOTAL	384	158	542	446	189	635	368	86	454	466	211	677	1,664	644	2,308

*No. III.—As to Caste and Religion.*

Brahmins and high castes	42	11	53	46	19	65	43	11	54	43	11	54	174	52	226
Agriculturists	137	47	184	118	33	151	150	27	177	164	37	221	569	164	733
Artisans	21	13	34	31	10	41	23	4	27	52	21	73	127	48	175
Low castes	148	68	216	202	105	307	187	35	162	183	113	296	660	323	983
Muslimans	36	19	55	40	22	71	25	9	34	24	7	31	134	57	191
Christians	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GRAND TOTAL	384	158	542	446	189	635	368	86	454	466	211	677	1,664	644	2,308

*Memo.*

	Male.	Female.	Total.
1. Hindus	1,530	387	2,117
2. Muslimans	134	57	191
3. Christians	...	...	...
TOTAL	1,664	644	2,308

E. C. BUCK,  
Secretary to the Government of India.

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on Monday,  
October 7th, 1889.**

Fine clear weather has continued over North-Western India throughout the whole week and over the Peninsula, Central India and the Central Provinces from the 1st to the 3rd of October, after which date frequent and general showers occurred. The mail steamer *Coromandel* experienced light variable winds and fine weather from Aden to Long.  $61^{\circ}$  E., and thence to Long.  $71^{\circ}$  light to moderate north-east breezes and fine weather. From Long.  $71^{\circ}$  E. to Bombay fresh north-west winds and heavy rain were reported. This report shows that the north-east winds of the cold weather have commenced over the centre of the Arabian Sea, and that the south-west monsoon except in the extreme south has completely given way. In the Bay of Bengal, though it cannot be said that the north-easterly winds of the cold weather have appeared during the week, there are yet indications of that recurving of the monsoon current which gives the north-east monsoon to the Coromandel Coast and which is accompanied by the appearance of north-easterly breezes over Assam, Bengal and the north of the Bay. In Ceylon there have been south-westerly winds and rain throughout the week, showing that in the extreme south of the Indian region the moist current of the south-west monsoon is still maintained. There have been one or two efforts at depression formation over the Bay during the week, but the necessary energy was apparently wanting and the disturbances never developed beyond the most feeble depressions, and the cyclonic circulations accompanying them were weak and irregular.

On the 1st pressure was very uniform throughout the whole of India, but moderate gradients existed over the Bay and a high pressure area was shown over the Gulf of Martaban. Calms or very variable breezes were reported from most districts, but a strongish southerly current was blowing over Lower Burma and up the valley of the Irrawaddy. On the 2nd the chart showed that the barometer had risen over the greater part of India, while it had fallen over Burma. In consequence the gradients over the Bay and Burma had disappeared and pressure was generally uniform. The winds were again light and variable. On the 3rd the tendency towards complete uniformity had advanced, and beyond a very slight and unimportant deficiency along the west coast of the Bay readings were very uniform everywhere. By the morning of the 4th this slight deficiency over the west of the Bay had developed into a well defined but shallow depression, and the barometer was falling briskly at the Madras stations and slightly elsewhere. Winds were practically unchanged. They were very irregular in direction around the Bay, and there was no indication of the establishment of cyclonic conditions which are ordinarily antecedent to the appearance of the north-east monsoon on the Madras Coast. On the morning of the 5th the barometer was rising over the Bay, while it was steady or falling elsewhere. In consequence the depression over the Bay had to a large extent filled up, and readings were again very uniform throughout the Indian region. Light and variable breezes were the prevalent feature of the air circulation except



around the Bay, where there was a certain amount of indraught towards the centre of the Bay. A small shallow depression was shown on the West Coast near Karwar. The chart of the 6th showed that the depression on the West Coast had developed somewhat and passed northward to the neighbourhood of Bombay. The weather was consequently unsettled on the Konkan Coast and a cyclonic circulation of fresh winds prevailed around a centre near Bombay. Elsewhere conditions were practically unchanged, uniform pressures and light variable breezes prevailing generally. On the 7th owing to a brisk fall of the barometer off the Madras Coast, a fresh depression was developed over the west of the Bay, and there were feeble and irregular cyclonic circulations over different parts of the Bay. The depression which has been shown near Bombay on the 6th had continued to advance northward, and its northern limits on the 7th extended into Kathiawar. Strongish south-easterly winds were blowing at Bombay, and the north-westerly winds and heavy rain reported off Bombay were doubtless attributable to this disturbance.

*Temperature.*—The characteristics of temperature have been approximately the same as those of the past two weeks, *vis.*, high day and low night temperatures. This characteristic has been more marked in North-Western India than elsewhere, but has been more or less observable in all parts of India except the Central Provinces, &c., and Burma, where owing to excessive rain the day temperatures have also been low. Maxima exceeding  $100^{\circ}$  were reported continuously during the week from the south and west of the Punjab and from Upper Sind.

The following table shows the amount of excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burma . . . . .	— $1.0^{\circ}$	— $0.8^{\circ}$
Bengal . . . . .	+ $1.0^{\circ}$	+ $1.0^{\circ}$
North-Western Provinces . . . . .	— $0.7^{\circ}$	+ $0.6^{\circ}$
Punjab . . . . .	— $0.8^{\circ}$	— $0.6^{\circ}$
Bombay . . . . .	+ $0.9^{\circ}$	— $0.1^{\circ}$
Central Provinces . . . . .	+ $2.1^{\circ}$	+ $0.6^{\circ}$
Guzerat and Central India . . . . .	+ $1.6^{\circ}$	+ $1.3^{\circ}$
Sind and Rajputana . . . . .	+ $0.6^{\circ}$	— $0.4^{\circ}$
Madras . . . . .	— $0.9^{\circ}$	— $0.4^{\circ}$

This table shows that over the greater part of the country the mean temperature relatively to the average is little changed. The weather is  $1^{\circ}$  cooler in Bombay, Sind and Rajputana and  $1\frac{1}{2}^{\circ}$  cooler in the Central Provinces in this week than last ; but elsewhere there is little alteration. The variations from the average are small, being less than  $1^{\circ}$ , except in Bengal and the Central Provinces.

*Rain.*—The relative distribution of rainfall during the present has been approximately the same as that reported last week except that there has been more rain over the Central Provinces, Guzerat and Kathiawar and less over North-Western India. The feeble depressions which have appeared over the Bay have occasioned more or less rain in their neighbourhood and the small storm which crossed Bombay gave fairly heavy rain to the Konkan and

neighbouring districts, but otherwise nearly all the rain which has fallen has been due to local showers.

The following is a brief description of the daily distribution of rainfall :

On the 1st there were a few scattered showers on the West Coast, in Khandeish and the Central Provinces, and heavyish rain in Burma. On the 2nd the distribution of rain was the same, but the amount had fallen off in Burma. The chart of the 3rd showed that the rainfall area had extended, general though slight rain being reported from the west coast of the Bay, South India, the Central Provinces and Central India, as well as from several parts of Bengal. On the 4th a similar distribution prevailed, but the falls were heavier both on the East and West Coasts of the Peninsula. On the 5th, 6th and 7th there was very little change, rain falling generally over the Peninsula, the Central Provinces, Burma and Bengal.

The table at the close of the summary shows an excess of rain at eighteen of the rainfall divisions and a deficiency at thirty-one. With the exception of a few drops in the centre and west of the North-Western Provinces, there has been no rain whatever over the whole of Northern India from Behar north-westward to the Indus. In most of the more western divisions of this region the ordinary fall during this week is very small and the absence of rain is hence unimportant, but in the eastern divisions the average fall is larger and the want of rain will probably be felt. The excess in Guzerat, Kathiawar and the Konkan is relatively considerable, but in the other divisions reporting heavy rain the excess is small.

In Burma two divisions, *vis.*, Lower and Central Burma, report heavy, and two, *vis.*, Tenasserim and Arakan, light rainfall. In Bengal and Assam every division shows short rain, and from Behar north-westward to the Indus, excluding the centre and west of the North-Western Provinces and including the west of Rajputana and Sind, there has been no rainfall whatever throughout the week. The West Coast districts as well as Khandeish, Berar and the west and centre of the Central Provinces have received more than the average amount of rain, and this excess has spread north-westward into Guzerat and Kathiawar. The east of Central India has also received heavy rainfall for the season; but the west of Central India as well as the whole of Rajputana has been practically without rain. The northern and southern parts of the Madras Presidency have had excessive rain, but the south of the Nizam's divisions and also the central divisions of Madras have all had a deficient supply of rain.

The state of the seasonal rainfall is shown by the last column of the table. The following divisions exhibit a deficiency exceeding 10% on the total rainfall which has been received since the 15th of May last :—Central Burma, East Bengal, Deltaic Bengal, the west of the North-Western Provinces, the central, sub-montane, hill, and north-western districts of the Punjab, Sind and Rajputana West. All these divisions were included in the deficiency list at the time of the last report, so that as Lower Burma, Khandeish and Guzerat have dropped out, the present report shows a slight improvement on its predecessor.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING OCTOBER 7TH, 1889.			RAINFALL DATA FROM MAY 15TH TO OCTOBER 7TH, 1889.		
		Average Actual Rainfall of Division.	Average Normal Rainfall of Division.	Excess or Defect, in inches.	Average Actual Rainfall of Season to date.	Average Normal Rainfall, May 15th to October 7th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	2'38	2'70	- 0'32	183'41	173'17	+ 6
	Lower Burmah	3'82	2'05	+ 1'77	83'87	88'88	- 6
	Central Burmah	2'07	1'99	+ 0'08	57'18	71'94	- 20
	Upper Burmah	2'27	?	?	30'91	?	?
	Arakan	2'88	3'66	- 0'78	167'52	175'33	- 4
BENGAL AND ASSAM	Eastern Bengal	0'47	1'80	- 1'33	65'41	77'27	- 15
	Assam (Surma)	0'60	1'67	- 1'07	114'95	91'75	+ 25
	Do. (Brahmaputra)	0'81	1'68	- 0'87	77'50	60'31	+ 17
	Deltaic Bengal	0'45	1'01	- 0'56	42'97	49'00	- 12
	Central Bengal	0'25	1'05	- 0'80	47'14	48'98	- 4
	North Bengal	1'16	2'08	- 0'92	97'57	92'04	+ 6
	Orissa	1'49	1'63	- 0'14	42'81	47'07	- 9
	Chutia Nagpur	0'07	1'01	- 0'94	42'30	45'93	- 8
	Behar (South)	0	1'44	- 1'44	40'33	39'30	+ 3
	Do. (North)	0	1'79	- 1'79	52'58	45'10	+ 17
NORTH - WESTERN PROVINCES AND ODDH.	North - Western Provinces (East).	0	0'73	- 0'73	43'70	33'40	+ 31
	Oudd (South)	0	0'86	- 0'86	40'43	33'87	+ 19
	Do. (North)	0	0'75	- 0'75	42'21	36'39	+ 16
	North - Western Provinces (Central).	0'02	0'51	- 0'49	27'02	28'70	- 6
	North - Western Provinces (West).	0'10	0'27	- 0'17	21'74	25'84	- 16
	North - Western Provinces (Submontane).	0	0'52	- 0'52	48'51	39'51	+ 23
PUNJAB	Punjab (South)	0	0'13	- 0'13	11'62	12'42	- 6
	Do. (Central)	0	0'29	- 0'29	16'75	21'39	- 22
	Do. (Submontane)	0	0'22	- 0'22	20'52	24'84	- 18
	Do. (Hill Districts)	0	0'30	- 0'30	59'28	77'05	- 24
	Do. (North-West)	0	0'20	- 0'20	16'07	18'61	- 14
	Do. (West)	0	0'04	- 0'04	6'72	6'57	+ 2
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	3'42	2'24	+ 1'18	106'50	99'35	+ 7
	Madras (South Central)	1'73	1'53	+ 0'20	33'26	17'04	+ 95
	Coorg	0'02	2'51	- 1'59	99'93	95'35	+ 5
	Mysore	2'22	1'84	+ 0'38	23'76	21'11	+ 13
	Konkan	2'36	1'44	+ 0'92	125'24	95'39	+ 31
	Bombay Deccan	1'78	1'10	+ 0'68	30'34	28'23	+ 7
	Hyderabad (North)	...	...	...	...	...	...
	Khandeish	1'95	1'49	+ 0'46	21'39	23'76	- 10
CENTRAL PROVINCES AND BERAR.	Berar	1'15	1'14	+ 0'01	33'95	32'54	+ 4
	Central Provinces (West)	0'91	0'78	+ 0'13	35'28	39'07	- 10
	Ditto (Central)	0'78	0'73	+ 0'05	50'62	48'78	+ 4
	Ditto (East)	0'37	0'72	- 0'35	53'46	48'18	+ 11
BOMBAY (NORTH)	Guzerat	1'68	0'79	+ 0'89	35'36	38'07	- 9
	Kathiawar	0'48	0'18	+ 0'30	26'53	26'52	0
	Sind	0	0	0	1'55	4'39	- 65
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	0'93	0'57	+ 0'36	38'24	35'13	+ 9
	Rajputana (East), Central India (West).	0'05	0'22	- 0'17	28'50	25'63	+ 11
	Rajputana (West)	0	0'10	- 0'10	8'73	12'99	- 33
MADRAS	East Coast (North)	2'79	1'83	+ 0'96	34'74	20'36	+ 32
	Do. (North) (a)	2'05	0'80	+ 1'19	30'90	36'36	+ 2
	Hyderabad (South)	0'71	0'90	- 0'19	24'76	21'51	+ 15
	Madras (Central)	1'23	1'57	- 0'34	22'61	18'48	+ 22
	East Coast (Central)	0'84	1'39	- 0'55	19'36	19'30	0
	Ditto (South)	1'04	1'35	+ 0'29	20'29	16'68	+ 22
	Madras (South)	1'60	1'51	+ 0'15	10'96	9'87	+ 11

W. L. DALLAS,

SIMLA, 10th October, 1889.

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

B

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 5th October.*—Rainfall general; good in most districts and slight in Nellore and Madras. Crops generally good, but affected by excessive rain or moisture in parts of Kistna, Bellary, Anantapur and Nilgiris; withering from want of rain in parts of South Arcot. Prices generally falling or stationary. Labourers employed last day of week.—Rushikulya works, 3,774; Gopalpore Canal, 730; Ghat Roads, 2,779; other minor works, 6,317. Number on village relief on 28th September, 28,266, including 17,122 children; fed in kitchens, 7,173, including 5,514 children. Imports into Ganjam during week by sea and land, 293 tons. General prospects favourable.

**Bombay.**—*For week ending 9th October.*—Rain during week generally sufficient; in parts excessive and injurious to crops. Standing crops generally good, but damaged by locusts and other insects in parts of Sind. Harvesting and sowing operations progressing. Fodder sufficient and agricultural stock healthy.

**Bengal.**—*For week ending 8th October.*—Rainfall has been general in Orissa, and showers are also recorded from some other districts, chiefly in Central and Eastern Bengal. Winter rice is generally in good condition, but requires more rain in the districts of the Burdwan and Chota Nagpur divisions, in some of the Cachar districts and in Balasore. In Burdwan, Hooghly and Balasore the rainfall has been deficient and the winter rice will be a short crop in consequence. Autumn harvests are nearly finished, and cultivation for the *rabi* crops is in progress. Sugarcane is generally recorded to be fair. Food-stocks are plentiful, and prices are steadily falling in the affected tracts in North Behar. In Chumparun the demand for gratuitous relief is on the decrease.

**North-Western Provinces and Oudh.**—*For week ending 9th October.*—Weather continues seasonable, but rain is still wanted in a few districts. The *kharif* crops are being harvested, and *rabi* sowings are in active progress. Prospects good. Supplies everywhere ample, but prices are rising in some districts owing to the demand for seed.

**Punjab.**—*For week ending 9th October.*—No rain. Prices are stationary in all districts except Rawalpindi, where they are rising. Harvesting of *kharif* crops commenced in Umballa and Dera Ismail Khan. Ploughing for *rabi* in progress. Rain much wanted for *rabi* sowings throughout the Province and also for *kharif* in Sialkot and Lahore. Condition of crops generally good except in Hissar, where they are withering. Prospects of standing crops are said to be generally fair. Outturn of cotton good in Peshawar. Fodder sufficient throughout the Province.

**Central Provinces.**—*For week ending 9th October.*—Weather hot and cloudy with occasional showers. Prospects of *kharif* crops generally continue very good. Outturn of *rabi* somewhat short in Jubbulpore owing to deficient rainfall; some more rain also required in eastern districts. Rice is being cut in Sambalpore, and the crop is a full one. Sowings of *rabi* crops commencing under favourable conditions. Prices steady.

**Burma.**—*For week ending 5th October.*—Sufficient rain fell throughout Lower Burma, and the crop prospect is generally good. Rain fell in all parts of Upper Burma, and the crop prospect is generally improving, but a little more rain is wanted in Meiktila. The price of paddy has risen 6 per cent. in Tharrawaddy, and fallen 7 per cent. in Akyab and 5 per cent. in Sagaing. No other changes are reported.

**Assam.**—*For week ending 9th October.*—Weather and rainfall seasonable. Prospects of rice and tea good. Sowing of pulses progressing.

**Mysore and Coorg.**—*For week ending 9th October.*—Rain has fallen more or less throughout the State of Mysore. Crops good. Sowing completed in parts. Outturn of harvest fair. Prices slightly risen in the Bangalore district.

Rainfall 1·54 inches in Coorg during the week. Picking of cardamom crop has commenced.

**Berar and Hyderabad.**—*For week ending 9th October.*—Average rainfall in Berar 1·70 inches. *Kharif* in good condition. Prices steady. Cattle healthy. Weeding continues. Preparation of fields for *rabi* in progress.

Rainfall in Hyderabad during the week 1·21 inches. *Abi* crops prospering. Water in tanks sufficient. Reaping of *kharif* crops in progress, but much retarded owing to continuous rainfall, which, though beneficial to *abi* crops, is doing damage to *kharif* crops. Prices stationary.

**Central India.**—*For week ending 9th October.*—Rain generally sufficient throughout Agency except in Gwalior. Probable outturn good generally. Prices falling in Goona and in parts of Bhopawar, and rising in Neemuch.

**Rajputana.**—*For week ending 9th October.*—Slight rain in some places. Standing crops slightly damaged by locusts in Marwar, Meywar and Jeypore. Rain much needed in some districts. Agricultural stock good. Pasturage sufficient. Fodder dear in Marwar. Prices steady generally.

**Nepal.**—*For week ending 3rd October.*—No rain. Night dews and morning mists commenced. Prospects very good.

E. C. BUCK,  
Secretary to the Government of India,



GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXIV. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 15TH SEPTEMBER 1888.		WEEK ENDING 14TH SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 15TH SEPTEMBER 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 14TH SEPTEMBER 1889.		Total increase in 1889-90.	Total decrease in 1889-90.		
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.			Total.	Per mile open per week.
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
State Lines worked by Companies.													
21st September 1889	East Indian (a)	1,526	7,00,257	498	1,526	7,00,349	403	1,92,88,464	306	1,06,58,006	537	3,99,632	
21st ditto	Patna-Gya.	57	7,919	139	57	10,789	189	1,91,797	140	2,01,017	146	9,220	
21st ditto	Dildarnagar-Ghazipur	75	5,481	73	75	5,481	73	1,68,891	94	1,68,891	94	1,68,891	
21st September 1889	Sindia	1,064	3,58,692	210	1,064	2,53,000	151	81,86,338	205	80,44,417	225	7,55,079	
21st ditto	Rajputana-Malwa	186	10,706	90	186	2,33,307	76	7,14,080	160	8,32,000	115	1,12,019	
21st ditto	Bengal-Nagpur (d)	850	57,079	68	850	55,290	65	17,92,851	88	19,38,864	94	1,46,013	
21st ditto	Southern Mahratta (f)	140	10,250	73	140	17,894	60	2,30,686	75	3,64,259	65	1,13,573	
14th ditto	Do. Mysore Section	136	8,403	62	136	44,463	60	3,28,975	101	12,61,633	81	9,32,658	
21st ditto	Vilupuram-Dharma- veram (Nellore Branch)	83	4,877	59	83	4,802	58	1,17,282	59	1,15,689	38	1,593	
21st ditto	Rareilly-Pilibhit	36	1,162	32	36	1,143	37	35,030	43	44,813	54	8,883	
	TOTAL	4,753	12,51,726	259	4,753	11,17,243	200	3,10,45,264	272	3,33,54,887	258	23,09,623	
State Lines worked by Government.													
21st September 1889	North Western (h)	2,413	4,31,717	215	2,413	4,37,051	183	1,11,84,073	189	1,22,58,145	215	10,74,073	
14th ditto	Oudh and Rohilkhand	692	1,10,307	159	692	1,06,402	154	31,72,677	191	35,39,544	213	3,66,867	
21st ditto	Bengal Central	145	17,140	137	145	20,180	101	2,96,025	99	3,32,929	111	36,904	
21st ditto	Wardha Coal	45	13,325	266	45	1,957	43	3,37,031	312	3,42,898	319	5,857	
21st ditto	Eastern Bengal	673	3,06,708	456	673	1,07,510	359	41,49,445	257	44,34,074	261	2,84,629	
21st ditto	Nalhati	27	1,561	58	27	1,036	61	45,212	70	44,885	70	44,885	
21st ditto	Tirhoot	259	23,715	92	259	22,183	83	7,54,600	127	8,76,547	140	1,21,947	
14th ditto	Lucknow-Sitapur	105	4,360	42	105	3,715	35	1,17,612	47	1,52,746	61	35,134	
21st ditto	Sikrmai	25	1,350	53	25	1,844	62	28,392	47	20,726	50	1,334	
14th ditto	Jahat	7	258	37	7	307	44	2,115	14	3,423	36	1,100	
21st ditto	Cherra-Companyganj	392	47,768	121	392	75,959	130	13,20,589	144	20,16,347	154	6,95,758	
	TOTAL	4,819	10,57,931	220	4,819	9,38,492	188	2,14,08,031	185	2,40,31,250	204	26,23,225	
Lines worked by Guaranteed Companies.													
21st September 1889	Madras	840	1,54,327	184	840	1,50,910	190	30,06,000	191	42,54,250	212	3,48,160	
21st ditto	South Indian	654	1,07,911	105	654	1,13,030	173	26,00,240	160	27,25,637	175	1,25,447	
21st ditto	Great Indian Peninsula	1,497	5,36,867	350	1,497	3,67,230	230	1,97,22,704	545	1,48,59,200	467	47,62,849	
21st ditto	Bombay, Baroda and Central India (i)	461	2,23,529	445	461	1,84,000	390	57,25,343	517	59,21,048	538	1,00,605	
	TOTAL	3,452	10,22,634	290	3,452	8,24,870	243	3,18,54,442	384	2,77,61,814	343	40,93,628	
GRAND TOTAL (GUARANTEED AND STATE)													
		13,023	33,12,291	253	13,023	28,80,510	205	8,43,07,737	270	8,51,47,957	259	8,219,220	
Gross Estimated Expenses													
		...	...	...	...	...	...	4,42,16,583	142	4,45,01,856	126	3,31,873	
NET RECEIPTS													
		...	...	...	...	...	...	4,00,91,154	128	4,05,99,501	123	5,08,347	
Assisted Companies.													
21st September 1889	Tirukeshwar	22	3,438	150	22	4,605	209	1,29,664	246	1,34,262	256	4,598	
21st ditto	Dibru-Sadiya	...	...	...	...	...	...	1,07,667	110	2,19,425	122	21,758	
21st ditto	Bengal and North- Western	376	24,023	60	376	29,930	80	11,32,084	124	11,81,020	133	66,942	
21st ditto	Rohilkhand-Kumaon	67	0,642	93	67	5,787	86	1,64,414	107	1,77,797	115	13,383	
	TOTAL	465	35,003	75	465	40,322	87	16,13,833	124	17,24,510	133	1,00,681	
Native States.													
21st September 1889	His Highness the Ni- zam's Guaranteed	310	31,008	102	310	37,977	107	7,45,069	109	10,26,874	122	2,81,805	
21st ditto	His Highness the Gaekwar's	59	1,983	34	59	2,310	34	61,310	43	61,822	44	512	
21st ditto	His Highness the Gaek- war's Verangam- Mehsana-Yadnagar	21	719	34	21	600	32	21,711	43	25,070	40	3,039	
21st ditto	Bhavnagar-Gondal	209	15,206	73	209	17,300	66	4,57,432	98	6,23,561	100	1,66,129	
21st ditto	Junagarh-Portbandar	68	2,544	37	68	2,573	38	80,215	53	95,204	80	9,489	
21st ditto	Morvi	124	4,543	30	124	0,000	48	1,63,970	55	1,50,000	53	6,000	
	TOTAL	791	56,583	271	791	66,760	75	15,35,707	85	1,99,964	93	4,54,722	

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Katali-Umaria Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kistna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(i) Includes the Tuengoo-Mandalay extension.

(j) Includes the Dhond-Mannud, Khannagan, Amroli, and Bhopal-Itarsi State Railways.

(k) Includes the Dhond-Mannud, Khannagan, and Amroli State Railways.

(l) Includes the Patri Branch.

(m) Return not received.

(n) Total receipts from 1st April to 8th September 1888.

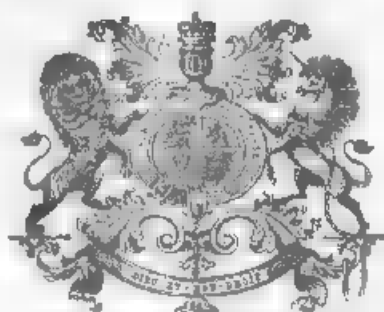
(o) Total receipts from 1st April to 7th September 1889.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

Simla, 20th October, 1889.

Printed and published for the GOVERNMENT OF INDIA at the GOVERNMENT CENTRAL PRESS, Simla.



SUPPLEMENT TO  
**The Gazette of India.**

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No. 42.} CALCUTTA, SATURDAY, OCTOBER 19, 1889.

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**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.*

*No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be issued to.*

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GOVERNMENT OF INDIA,  
DEPARTMENT OF FINANCE AND COMMERCE.

*Comparative Statement of the Net Indian Sea and Land Customs Revenue (excluding Salt Revenue) for the first six months of the official year 1889-90, and of the  
eighteen preceding years.  
(In thousands of Rupees.)*

YEAR.	BOMBAY.				SINDH.			MADRAS.			BURMA.				TOTAL BRITISH INDIA.				YEAR.		
	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.			
1871-72	5.38	36.54	10.61	52.53	3.81	18.83	1.84	6.22	7.32	1.76	6.22	15.30	78	2.00	9.51	12.29	64.09	76.48	90.96	1871-72	
1872-73	6.59	36.64	11.34	54.57	2.70	19.48	2.11	5.85	5.64	1.94	5.85	15.43	1.60	2.25	18.00	21.85	64.71	78.07	97.61	1872-73	
1873-74	5.16	32.43	8.39	45.98	2.91	17.00	1.49	6.68	7.21	1.84	6.68	15.73	1.62	2.30	14.08	18.00	59.64	71.73	91.73	1873-74	
1874-75	5.95	38.28	6.22	50.45	3.20	19.74	1.55	6.95	6.74	1.74	6.95	15.43	2.03	3.18	9.77	14.68	68.45	81.96	95.00	1874-75	
1875-76	6.14	38.71	7.63	52.48	3.34	20.11	1.91	7.11	6.92	2.10	7.11	16.23	1.80	2.31	17.51	21.62	68.76	82.76	96.33	1875-76	
1876-77	6.31	30.89	6.07	43.27	3.02	17.53	1.13	6.75	4.34	2.32	6.75	13.71	2.23	2.53	12.40	17.16	57.84	73.82	97.26	1876-77	
1877-78	7.05	39.19	7.27	53.51	4.37	21.09	1.62	3.85	8.5	2.96	3.85	7.26	2.42	2.72	9.30	14.44	67.22	84.69	98.09	1877-78	
1878-79	6.55	31.32	6.59	44.46	4.05	18.70	1.26	4.74	4.03	2.97	4.74	9.76	3.03	3.34	12.94	19.91	58.35	76.46	97.75	1878-79	
1879-80	5.02	31.25	4.30	40.57	4.39	15.84	1.97	4.41	2.72	2.64	4.41	9.77	3.35	3.03	16.89	23.69	54.93	72.72	97.59	1879-80	
1880-81	6.57	39.00	5.15	40.72	4.15	21.93	2.75	5.28	4.52	2.30	5.28	12.19	2.34	3.80	18.30	24.44	61.55	79.11	98.84	1880-81	
1881-82	6.72	28.20	7.42	42.34	5.03	20.60	2.61	5.02	3.11	2.42	5.02	10.55	3.33	3.76	21.67	28.76	58.25	77.64	98.06	1881-82	
1882-83	7.01	...	7.33	14.36	5.12	11.05	1.99	...	2.10	2.63	...	4.74	3.99	3	26.41	39.43	20.46	19.48	36.73	56.21	1882-83
1883-84	6.95	6	8.99	16.00	5.27	20	1.96	2.62	7	2.70	2.62	5.39	3.81	8	19.25	23.14	20.40	20.82	31.66	52.48	1883-84
1884-85	5.91	17	4.07	11.05	4.86	19	2.15	2.32	3	2.32	3	3.49	3.82	6	14.08	17.96	18.77	19.22	23.19	42.41	1884-85
1885-86	6.37	9	6.15	12.61	5.64	22	2.47	2.38	6	2.38	6	4.05	3.15	3	21.65	23.53	19.66	20.08	31.16	51.24	1885-86
1886-87	6.40	19	4.96	11.55	5.84	28	2.71	3.00	2.64	3.00	6	5.70	4.40	6	18.39	22.85	21.84	22.40	26.96	49.45	1886-87
1887-88	5.27	22	6.07	12.46	6.02	21	2.82	4.51	2.46	4.51	2	6.99	4.56	1	19.78	24.35	24.01	24.30	29.90	54.49	1887-88
1888-89	6.09	3.06	7.91	17.06	7.01	1.78	3.39	4.97	2.65	4.97	29	7.91	4.35	62	13.22	18.19	25.91	32.27	24.36	96.83	1888-89
1889-90	7.10	4.46	6.06	17.62	7.72	1.02	3.42	5.13	3.42	5.13	36	8.91	4.07	1.58	21.05	26.70	26.70	34.68	31.70	96.32	1889-90

\* The amount refunded is greater than the duty collected.

DEPARTMENT OF FINANCE AND COMMERCE,

STATISTICAL BRANCH;

Calcutta, 16th October, 1889.

E. J. SINKINSON,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

HOME DEPARTMENT.

The following Resolution is published for general information :

PROCEDURE TO BE FOLLOWED IN THE TREATMENT OF CASES OF INDEBTEDNESS  
OF GOVERNMENT OFFICIALS.

No. <sup>29</sup>  
1770-92

*Extract from the Proceedings of the Government of India in the Home Department (Public),—under date Simla, the 8th October, 1889.*

Read again—

Home Department Resolution No. 2-77 to 102 (Public), dated 19th January, 1884.

RESOLUTION.

In the Resolution of January 1884 cited in the preamble the Governor General in Council invited the attention of all Local Governments and Heads of Departments to the imperative duty which devolves on them of taking severe notice of the conduct of clerks and other employes who allow themselves to fall into embarrassed circumstances, and it was pointed out that Assistants in Government offices should clearly understand that, if they voluntarily contract debts or obligations which they are unable to meet, they render themselves liable to summary dismissal.

2. His Excellency in Council has reason to fear that the tenor of these orders has not always been properly understood, and desires to supplement them by more definite instructions as to what constitutes such a state of indebtedness as to render it undesirable that a person should be retained in the public service. The Governor General in Council accordingly directs that where half the salary of a Government official is constantly being attached for debt, or has been continuously under attachment for more than two years, or is attached for a sum which, under ordinary circumstances, it will require more than two years to repay, a full schedule of the officer's debts should be obtained by the head of the office and the case dealt with in the same way as if the debtor had taken advantage of the insolvency court. In such cases it should be specially ascertained—

- (1) what is the proportion of the debts to the salary and the extent to which they detract from the debtor's efficiency as a public servant;
- (2) whether the debtor's position is irretrievable;
- (3) whether it is desirable under the circumstances to retain him—
  - (a) in the particular post he occupies, or
  - (b) in any position under Government.

It will be for Local Governments and the different Departments under the Government of India to issue subsidiary directions to officers subordinate to them as to the authority to which the schedule of debts and the report on it should be submitted for orders.

**ORDER.**—Ordered, that this Resolution be communicated to the Local Governments (except Madras) and Administrations; to all the Departments of the Government of India and to the Heads\* of offices under the Home Department.

\* Superintendent of Port Blair and the Nicobars.  
 Sanitary Commissioner with the Government of India.  
 Surgeon-General with the Government of India.  
 Secretary, Board of Examiners.  
 Registrar, Calcutta University.  
 Bishop's Chaplain.  
 Registrar, High Court (with usual covering letter).

(True Extract.)

C. J. LYALL,

*Offg. Secretary to the Government of India.*



## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on Monday,  
October 14th, 1889.**

There has been no change in the general meteorological conditions. The fine weather which prevailed over nearly the whole of Northern India and the unsettled showery weather which prevailed over Bengal and the Peninsula have alike continued uninterruptedly during the week under review. In the Bay of Bengal the change to cold weather conditions has been carried out during the week, and the north-east monsoon has burst on the Coromandel Coast early and with somewhat more than the usual vigour. During the greater part of the period under review pressure has been very uniform, and the weather undisturbed; but towards the close of the week a well marked depression formed over the Bay, and established a fairly complete cyclonic circulation over the greater part of the Bay.

On the 8th pressure was very uniform all over India, though slightly higher in Assam and lower in Madras than elsewhere. The winds were very light and very variable in direction, and over North-Western India calms were reported in the majority of cases. On the 9th the uniformity of pressure and the variability of the winds continued, and the general weather conditions were such as are ordinarily experienced during October when the transition is effected from the rains to the cold weather. On the 10th the only change of importance was the brisk fall of the barometer which occurred in the Punjab and resulted in the production of a well marked depression. The winds showed an irregular circulation around this low pressure area, but elsewhere the directions remained irregular and variable. The Chart of the 11th showed a further development of the Punjab depression, and a more complete cyclonic circulation of the winds in North-Western India. Elsewhere uniform pressures and variable winds continued. On the evening of the 11th the Punjab depression apparently moved northward into the hills, as slightly unsettled and thundery weather was experienced there, and the next morning the barometer was rising all over Northern India, and no trace of the depression remained. On the morning of 12th a shallow low pressure area lay off the West Coast of the Peninsula, but otherwise readings were very uniform. On the 13th the barometer began to fall over the Bay and a depression to form there. At the same time the wind drew into north on the Circars Coast and into north-west from Madras to Negapatam, showing an initial cyclonic circulation around the Bay. The lowest recorded readings of the barometer were however still reported from the West Coast. In Northern and Central India the barometer was very uniform, the winds light and the weather fine. On the 14th the depression over the Bay had undergone very considerable development, the barometer had fallen briskly off the Coromandel Coast, and a small centre of depression was advancing towards the coast between Madras and Nellore. Strongish cyclonic winds prevailed over the south-west of the Bay, and the weather there and over the Peninsula generally was unsettled. Over Northern India and the north of the Peninsula steady fine weather and light variable winds prevailed.

*Temperature.*—The remarkably low night temperatures, which have prevailed during the past few weeks over the greater part of Northern and Central India, have been equally noticeable during the present week, the relative coolness, indeed, showing signs of increasing. At Quetta on the 14th the minimum was 6° below the normal, at Multan 8°, at Lahore and Sirsa 10°, at Meerut Sambhar, Ajmere and Rajkot 7°, and at Deesa 9°; these differences being on the whole larger than those of the preceding days. At the close of the week in the Punjab the day temperatures also fell below the normal, and the general deficiency over that Province became nearly 4°. This early coolness over North-Western India is the more remarkable, as there does not appear from the reports to have been any early snow in the mountains.

The following table shows the amount of excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burma	- 0.8°	+ 0.9°
Bengal	+ 1.0°	+ 0.9°
North-Western Provinces	+ 0.6°	+ 0.7°
Punjab	- 0.6°	- 1.5°
Bombay	- 0.1°	+ 0.9°
Central Provinces	+ 0.6°	+ 0.9°
Guzerat and Central India	+ 1.3°	+ 0.8°
Sind and Rajputana	- 0.4°	- 1.0°
Madras	- 0.4°	+ 0.2°

This table shows that relatively to the average there has been very little change of temperature, except in the Punjab and Bombay, where there has been a fall and rise of about 1° respectively.

*Rain.*—There has been no rain whatever in Upper India, and in the Central Provinces after a few showers the rains seem also to have ceased. In Bengal on the contrary the weather has been showery throughout the week, and in the Peninsula most unsettled and unusually rainy weather has accompanied the low pressures which have prevailed over that part of the Indian region.

The following is a brief description of the daily distribution of rainfall :

On the 8th scattered showers were reported from Lower Bengal, the coast districts of the Peninsula, Mysore and the Central Provinces. The amounts were, however, in nearly all cases light, and the other parts of the Indian region were rainless. On the 9th a similar distribution prevailed, but the extent and amount of the rainfall had alike increased. On the 10th the rainfall had again decreased in extent, and had entirely ceased over the Central Provinces. In East Bengal some local heavy falls were reported. On the 11th rain was reported from the greater part of Bengal, from the West Coast of the Bay and from several stations in the inland and West Coast districts of the Peninsula. On the 12th there was no change, but on the 13th the rainfall ceased over the north of the Bay and became concentrated over the south of the Peninsula. On the 14th every station to the south of Lat. 16° reported rain, the amounts being large in some places.

The table at the close of the summary shows that the week's rainfall has been on the whole deficient. In normal years only one division, *viz.*, Sind, has no rain whatever during the week just passed, while in the present case there are no less than eleven divisions reporting no rain. In many of these divisions, no doubt, the rainfall is normally very slight, and the absence of it is a matter of little consequence, but in others the normal rainfall is quite appreciable and the want of it may not improbably be felt. The 3rd column of the table shows that at thirty of the rainfall divisions the amount is short and that at nineteen it is in excess of the normal. The regions where the rain is short are roughly Burma, Upper India from Behar to the Indus, the Central parts of the country and Rajputana. In Burma all the districts have received deficient rain and Cachar and Eastern and Deltaic Bengal have participated in this defect, but Central and North Bengal, the Brahmaputra valley, Orissa and Chutia Nagpur have all received heavy rain. From Chutia Nagpur north-westward up the Gangetic plain to the Indus there has been practically no rain. The West Coast districts, including Berar, the Deccan, Guzerat and Kathiawar, have all received more than the normal rainfall—in some cases largely so; but over the Central Provinces and the east of the Peninsula the variations in the rainfall are irregular. Rajputana and Central India like the region to the northward have received little or no rain.

The maximum falls are in no way remarkable over the greater part of India, but some places on the West Coast of the Peninsula, in parts of Madras and in East Bengal have received large amounts, thus :

Netrokona in Mymensingh reports 10½ inches; Cottayam in Travancore 10½ inches; Muddibehal in Bijapur 8 inches; Sompet in Ganjam 10½ inches; and Palmanavi in North Arcot 7 inches.

The concluding column of the table shows the result of the past rains. Over the greater part of the country the fall has been fairly good, but in the following divisions the seasonal rainfall has been more than 10 % deficient:—Central Burma, East and Deltaic Bengal, the west of the North-Western Provinces, the centre, submontane, hill, and north-western districts of the Punjab Khandeish, Sind and Rajputana.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING OCTOBER 14TH, 1889.			RAINFALL DATA FROM MAY 15TH TO OCTOBER 14TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 15th to October 14th.	Excess or De- fect (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	0'44	2'66	- 2'22	183'85	175'83	+ 5
	Lower Burmah	0'98	2'14	- 1'16	84'85	91'02	- 7
	Central Burmah	1'76	1'70	- 0'03	58'94	72'74	- 19
	Upper Burmah	1'17	?	?	39'33	?	?
	Arakan	0'33	2'67	- 2'34	107'85	178'00	- 6
BENGAL AND ASSAM	Eastern Bengal	1'27	1'76	- 0'49	66'68	79'04	- 16
	Assam (Surma)	0'73	1'90	- 1'17	115'67	93'65	+ 24
	Do. (Brahmaputra)	1'42	1'16	+ 0'26	78'98	67'47	+ 17
	Deltaic Bengal	1'07	1'51	- 0'44	44'04	50'60	- 13
	Central Bengal	1'68	1'34	+ 0'34	48'60	50'32	- 3
	North Bengal	0'87	0'79	+ 0'08	98'43	92'83	+ 6
	Orissa	3'09	1'88	+ 1'21	45'91	48'06	- 6
	Chutia Nagpur	1'64	1'02	+ 0'62	44'03	40'95	- 6
	Behar (South)	0'40	0'59	- 0'19	40'72	39'89	+ 2
	Do. (North)	0'27	0'70	- 0'43	52'85	45'80	+ 15
NORTH - WESTERN PROVINCES AND ODDH.	North - Western Provinces (East).	0'02	0'51	- 0'49	43'72	33'91	+ 29
	Oudh (South)	0	0'33	- 0'33	40'43	34'20	+ 18
	Do. (North)	0	0'42	- 0'42	42'21	36'81	+ 13
	North - Western Provinces (Central).	0	0'24	- 0'24	27'02	28'94	- 7
	North - Western Provinces (West).	0	0'14	- 0'14	21'74	25'98	- 16
	North - Western Provinces (Submontane).	0	0'36	- 0'36	48'54	39'87	+ 22
PUNJAB	Punjab (South)	0	0'14	- 0'14	11'62	12'56	- 7
	Do. (Central)	0	0'18	- 0'18	16'75	21'57	- 23
	Do. (Submontane)	0'02	0'08	- 0'06	20'54	24'92	- 18
	Do. (Hill Districts)	0'01	0'30	- 0'29	59'29	77'94	- 24
	Do. (North-West)	0	0'15	- 0'15	16'07	18'76	- 14
	Do. (West)	0	0'04	- 0'04	6'72	6'60	+ 2
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	3'88	2'79	+ 1'09	110'38	102'14	+ 8
	Madras (South Central)	2'85	1'88	+ 0'97	36'70	18'91	+ 91
	Coorg	0'93	2'45	- 1'52	100'86	97'80	+ 3
	Mysore	3'89	1'73	+ 2'16	27'65	22'84	+ 21
	Konkan	0'71	0'65	+ 0'06	125'95	96'04	+ 31
	Bombay Deccan	1'56	0'89	+ 0'67	31'90	29'11	+ 10
	Hyderabad (North)	...	...	...	...	...	...
	Khandeish	0'29	0'75	- 0'46	21'68	24'52	- 12
CENTRAL PROVINCES AND BERAR.	Berar	0'27	0'19	+ 0'08	34'22	32'73	+ 5
	Central Provinces (West)	0'14	0'18	- 0'04	35'44	39'25	- 10
	Ditto (Central)	0'17	0'18	- 0'01	50'79	48'96	+ 4
	Ditto (East)	2'47	0'26	+ 2'16	55'89	48'44	+ 15
BOMBAY (NORTH)	Guzerat	0'23	0'15	+ 0'08	35'58	38'82	- 8
	Kathiawar	1'16	0'09	+ 1'07	27'09	26'61	+ 4
	Sind	0	0	0	1'55	4'39	- 65
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	0'08	0'20	- 0'12	38'33	35'33	+ 10
	Rajputana (East), Central India (West).	0'07	0'09	- 0'02	28'63	25'71	+ 11
	Rajputana (West)	0	0'05	- 0'05	8'73	13'04	- 33
MADRAS	East Coast (North)	3'23	1'79	+ 1'44	37'97	28'16	+ 35
	Do. (North) (a)	1'85	1'07	+ 0'78	38'75	37'43	+ 4
	Hyderabad (South)	0'29	0'84	- 0'55	25'04	22'34	+ 12
	Madras (Central)	2'06	1'00	+ 1'06	24'67	19'47	+ 27
	East Coast (Central)	1'33	1'60	- 0'27	20'60	20'90	- 1
	Ditto (South)	2'04	1'48	+ 1'16	22'93	18'16	+ 26
	Madras (South)	2'10	1'73	+ 0'37	13'07	11'60	+ 13

W. L. DALLAS,

Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,

Secretary to the Government of India.

B

SIMLA, 17th October, 1889.

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 12th October.*—Rainfall during week general and good in all districts. Crops generally good, but withering from want of rain or water in parts of Nellore, Chingleput and South Arcot and suffering from excessive rain in parts of Anantapur, Bellary and Nilgiris. Prices generally stationary. Labourers employed last day of week,—on Rushikulya works, 2,016; Gopalpore Canal, 472; Ghat Roads, 1,987; other minor works, 6,834. Number on village relief, 20,560, including 12,430 children; fed in kitchens, 5,275, including 3,913 children. Imports into Ganjam during week by sea and land, 350 tons. General prospects good.

**Bombay.**—*For week ending 16th October.*—Rain during week almost general throughout the Presidency Proper, injuring crops in parts; total fall generally sufficient. Crops damaged by locusts in parts of Sind; elsewhere good. Harvesting and sowing operations in full progress. Fodder prospects good and agricultural stock generally healthy.

**Bengal.**—*For week ending 15th October.*—Good general rain has fallen in Orissa and Chota Nagpur, and local showers, in most cases light, are reported from almost all other districts. Prospects of the winter rice crop are generally favourable, but more rain is still required, chiefly for the highlands in the western districts of Bengal and in some of the Behar districts. Autumn harvests are now practically over, and the outturn is generally fair. Cultivation of *rabi* crops is in progress and sowings have begun. Sugarcane is in fair condition. Prices of rice are still high and almost stationary throughout the Province. In the affected tracts in Behar prices have fallen, and food-stocks are sufficient.

**North-Western Provinces and Oudh.**—*For week ending 16th October.*—Though more rain would be beneficial in Jhansi, Meerut and Saharanpur, the weather has been very favourable for the harvesting of the *kharif* and ploughing for and sowing of *rabi* which were in full progress during the week. The outturn where reported promises well. Markets are well supplied. Prices fluctuating.

**Punjab.**—*For week ending 16th October.*—No rain. Prices stationary in all districts, except Delhi and Amballa where they are rising. Harvesting of *kharif* crops commenced in certain districts. Ploughings for and sowings of *rabi* in progress. Rain wanted for *rabi* sowings in all districts and also for *kharif* in Ferozepur and Lahore. Crops are reported to be in good condition, except in Hissar where they are withering. Prospects of standing crops fair, only rice crop is suffering for want of rain in some districts. Fodder sufficient throughout the Province.

**Central Provinces.**—*For week ending 16th October.*—Weather clear with light rain in places, and good showers in eastern districts. Rice being cut and is yielding good outturns; other standing crops in excellent condition. *Rabi* sowings commenced. Prices generally steady and falling in places.

**Burma.**—*For week ending 12th October.*—Heavy rain fell in the Pegu, Prome, Henzada, Shwegyin and Toungoo districts, and light showers elsewhere in Lower Burma. The crop prospect in Lower Burma continues good. Heavy rain fell in Magwe and Yamethin districts, in other districts in Upper Burma there was light rain except in Mandalay where none fell. Prospects of crops in Upper Burma good generally. The price of paddy has fallen 10 per cent. in Sandoway; 8 per cent. in Henzada; 4 per cent. in Thayetmyo; 10 per cent. in Moulmein; 5 per cent. in Tavoy and 6 per cent. in Lower Chindwin. Prices rose 5 per cent. in Shwegyin and were stationary elsewhere.

**Assam.**—*For week ending 16th October.*—Rainfall light. Land being prepared for mustard and pulses. Winter rice and tea doing well.

**Mysore and Coorg.**—*For week ending 16th October.*—Rain in Civil and Military Station 3·12 inches. Rainfall good in Bangalore, Kolar, Tumkur and Mysore districts. Crops good except in parts of the Bangalore district where excessive rain has fallen. Dry crops being harvested in parts. Prospects favourable. No material change in prices.

Rainfall 5 inches in Coorg. Standing crop in good condition. Picking of cardamoms commenced.

**Berar and Hyderabad.**—*For week ending 16th October.*—Average rainfall 39 inch in Berar. *Kharif* is in good condition. Sowing of *rabi* crops commenced. Fodder sufficient except in Chikhli, Buldana district. Agricultural stock is in good condition. Prices unchanged.

Rainfall during the week in Hyderabad 87 inch. Total since 1st January 34·15 inches. *Abi* crop benefited; *kharif* crops damaged; and *rabi* sowings delayed by rainfall of week. Water in tanks sufficient for *abi* and *tabi* crops. Prices stationary.

**Central India.**—*For week ending 16th October.*—No rain fell during the week. Crop prospects continue generally good. Prices rising in Goona.

**Rajputana.**—*For week ending 16th October.*—Rainfall slight in Pertabgarh, moderate in Shahpura, elsewhere *nil*. *Rabi* sowings in progress. Standing crops being harvested. Agricultural stock good. Fodder dear in Marwar and failing in Dholepur. Prices rising in Jhallawar, Kerowlee and Dholepur. Opium and cotton promising in Jeypur, but injured for want of rain in Dholepur.

**Nepal.**—*For week ending 10th October.*—No rain. Clear sky. Prospects very good.

J. MUIR-MACKENZIE,

*Offg. Secretary to the Government of India.*



GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXV. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 22ND SEPTEMBER 1889.		WEEK ENDING 21ST SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 22ND SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 21ST SEPTEMBER 1889.		Total increase in 1889-90.	Total decrease in 1889-90.		
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.			Total.	Per mile open per week.
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
28th September 1889	State Lines worked by Companies.												
28th ditto	East Indian	1,514	7,45,025	492	1,526	(a) 6,95,680	456	1,09,68,419	528	2,03,53,776	534	3,88,357	
28th ditto	Patna-Gya.	57	15,434	271	57	16,304	284	2,07,251	145	2,17,221	152	9,970	
28th ditto	Dildarnagar-Ghazipur	12	348	46	...	(b)	...	35,618	119	(b)	...	35,618	
28th September 1889	Sindia	73	4,305	64	...	(c)	...	1,73,696	93	(c)	...	1,73,696	
28th ditto	Rajputana-Malwa	1,664	3,38,021	203	1,672	2,28,000	136	85,74,359	205	91,66,444	221	6,42,085	
28th ditto	Bengal-Nagpur (d)	186	14,388	77	305	(e) 25,186	83	7,28,468	157	(e) 8,51,285	114	1,22,817	
28th ditto	Southern Mahratta (f)	830	36,172	66	956	60,403	78	18,48,993	87	20,03,206	94	1,56,273	
28th ditto	Do. Mysore Section	140	8,909	64	296	19,343	65	2,59,615	74	3,84,817	65	1,25,162	
28th ditto	Indian Midland	136	6,906	51	746	(f) 47,272	63	3,35,881	99	(f) 13,11,869	80	9,75,988	
28th ditto	Villupuram-Dharmavaram (Nellore Branch)	83	4,183	50	83	4,295	52	1,21,415	59	1,19,063	58	...	
28th ditto	Bareilly-Pilibhit	36	857	24	36	1,419	39	36,787	43	46,210	53	9,423	
	TOTAL	4,753	11,95,278	251	5,577	11,03,801	193	3,22,40,542	271	3,44,56,851	256	22,16,309	
28th September 1889	State Lines worked by Government.												
28th ditto	North Western (h)	2,469	4,59,508	186	2,386	4,54,873	195	1,10,43,581	189	1,27,23,019	214	10,79,438	
28th ditto	Oudh and Rohilkhand	692	97,105	140	692	1,13,483	164	32,60,782	180	36,60,157	212	3,60,375	
28th ditto	Bengal Central	125	19,208	154	125	19,190	153	3,15,233	101	3,12,119	113	36,836	
28th ditto	Wardha Coal	45	8,749	194	45	9,792	218	3,45,771	397	3,52,680	315	6,904	
28th ditto	Eastern Bengal	673	2,91,496	433	747	2,03,350	353	44,40,941	260	46,97,424	265	2,56,483	
28th ditto	Nalhati	27	2,395	89	27	1,693	93	47,607	71	46,843	20	...	
28th ditto	Tirhoot	259	22,410	87	273	24,687	90	7,77,070	125	9,01,296	128	1,24,226	
28th ditto	Lucknow-Sitapur	105	3,775	36	105	4,177	40	1,21,387	46	1,57,029	60	35,642	
28th ditto	Sitabmau	25	1,610	64	25	1,190	48	30,002	48	30,916	50	914	
28th ditto	Jorhat	...	...	...	...	(i)	...	...	...	(j) 2,315	14	1,100	
28th ditto	Cherra-Companyganj	392	40,027	102	553	75,394	137	13,60,616	148	20,92,474	159	7,31,858	
	TOTAL	4,812	9,46,274	197	4,978	9,77,939	196	2,23,54,305	186	2,50,17,381	203	26,63,076	
28th September 1889	Lines worked by Guaranteed Companies.												
28th ditto	Madras	840	1,46,326	174	840	1,77,835	212	40,52,616	193	44,29,439	212	3,76,823	
28th ditto	South Indian	654	1,00,419	153	654	1,08,473	166	27,00,659	165	28,16,350	174	1,34,721	
28th ditto	Great Indian Peninsula	1,497	(m) 4,92,272	329	1,440	(n) 4,03,680	280	2,01,15,941	537	1,53,44,941	428	47,71,000	
28th ditto	Bombay, Baroda and Central India (o)	1,651	2,07,052	449	461	1,58,000	343	59,32,395	515	60,81,415	531	1,40,020	
	TOTAL	3,452	5,46,269	274	3,395	8,47,988	250	3,28,00,711	380	2,86,90,275	340	41,10,400	
GRAND TOTAL (GUARANTEED AND STATE)		13,017	30,87,821	257	13,950	29,29,718	210	8,73,95,558	269	8,81,64,507	258	7,68,949	
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	4,58,51,584	141	4,61,62,310	135	3,10,726	
NET RECEIPTS		...	...	...	...	...	...	4,15,43,974	128	4,20,02,197	123	4,58,223	
28th September 1889	Assisted Companies.												
28th ditto	Tarakeshwar	22	3,372	153	22	4,625	210	1,33,036	242	1,39,887	254	5,851	
28th ditto	Dibru-Sadiya	...	...	...	...	(i)	...	(j) 2,06,942	111	(k) 2,28,032	124	21,090	
28th ditto	Bengal and North-Western	376	36,562	97	376	27,170	72	11,58,646	123	12,15,610	130	36,964	
28th ditto	Rohilkhand-Kumaun	67	4,770	73	67	6,114	91	1,69,184	105	1,84,412	115	15,228	
	TOTAL	465	44,704	96	465	37,909	82	16,67,808	123	17,66,941	131	40,133	
28th September 1889	Native States.												
28th ditto	His Highness the Nizam's Guaranteed	310	26,109	84	354	43,404	123	7,71,178	109	10,70,278	127	2,99,100	
28th ditto	His Highness the Gaekwar's	59	1,989	34	59	2,110	36	63,299	43	64,140	44	841	
28th ditto	His Highness the Gaekwar's Veramgam	21	847	40	27	500	33	22,558	43	26,345	39	3,787	
28th ditto	Mehsana-Vadnagar	209	14,857	71	263	15,586	50	4,72,289	97	6,38,225	99	1,65,936	
28th ditto	Bhavnagar-Gondal	68	2,139	31	68	2,324	35	88,354	52	98,122	58	9,768	
28th ditto	Junagarh-Portbandar	124	6,098	54	124	5,300	43	1,70,668	55	1,61,868	53	...	
	TOTAL	791	52,639	67	893	69,194	78	15,88,346	84	20,88,978	93	4,70,632	

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Katni-Umaria Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kista State Railway.

(g) Includes the Sindia and Bhopal-Jirga State Railways.

(h) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(i) Return not received.

(j) Total receipts from 1st April to 15th September 1888.

(k) Total receipts from 1st April to 14th September 1889.

(l) Includes the Loughoo-Mandalay extension.

(m) Includes the Dhond-Manmad, Khangaon, Amraoti, and Bhopal State Railways.

(n) Includes the Dhond-Manmad, Khangaon, and Amraoti State Railways.

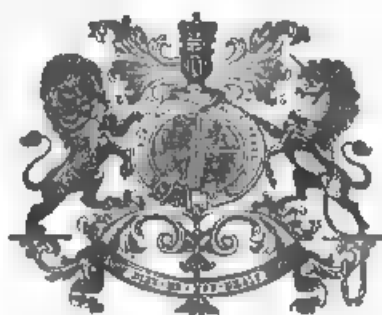
(o) Includes the Patri Branch.

S.M.A., 17th October, 1889.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

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SUPPLEMENT TO  
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No. 43.] CALCUTTA, SATURDAY, OCTOBER 26, 1889.

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**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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[illegible]

Not procurable.

• Not sold.

(a)  $T_{\text{total}} = 100 \text{ ms}$

RETAIL PRICES FOR THE 1st HALF OF SEPTEMBER 1880—continued.

[illegible]





## RETAIL PRICES FOR THE 1st HALF OF SEPTEMBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

Districts	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR SAGI (Zizania sesuviae).		KARONI OR TAKUM, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arafindum).		MAHA (Zea Mays).		ARHAR, OR TRUE, CADIAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.	Present	Fortnight.
<b>Punjab—</b>																										
<b>Southern—</b>																										
Missa	19 0	19 0	30 0	30 0	...	...	10 0	10 0	24 0	24 0	22 0	22 0	...	...	20 0	20 0	27 0	27 0	17 0	17 0	...	...	150 0	150 0	10 0	10 0
Ferozpur	20 0	20 0	37 0	36 0	...	...	9 0	9 0	26 0	26 0	23 0	22 0	...	...	24 0	24 0	33 0	32 0	22 0	22 0	...	...	100 0	100 0	13 4	13 0
Montgomery	18 0	18 0	28 0	25 0	...	...	10 0	9 0	20 0	20 0	15 0	15 0	...	...	25 0	25 0	25 0	25 0	20 0	20 0	...	...	200 0	200 0	11 0	11 0
<b>Central—</b>																										
Gurgaon	18 0	17 0	28 0	25 0	...	...	9 0	9 0	25 0	25 0	23 0	21 0	...	...	...	...	24 0	24 0	24 0	23 0	...	...	130 0	130 0	11 0	11 0
Della	18 0	18 0	24 0	25 0	...	...	10 0	10 0	24 0	24 0	20 0	20 0	...	...	16 0	12 0	24 0	24 0	24 0	24 0	...	...	70 0	70 0	11 0	11 0
Kohat	18 0	17 0	23 0	23 0	...	...	9 0	10 0	26 0	26 0	22 0	20 0	...	...	16 0	18 0	26 0	26 0	18 0	17 0	...	...	120 0	120 0	10 0	10 0
Karnal	18 0	18 0	27 0	27 0	...	...	9 0	9 0	20 0	20 0	16 0	16 0	...	...	18 0	18 0	28 0	28 0	25 0	25 0	...	...	120 0	120 0	10 0	10 0
Lahore	19 0	18 0	32 0	32 0	...	...	9 0	9 0	20 0	20 0	16 0	16 0	...	...	22 0	22 0	31 0	30 0	25 0	25 0	...	...	85 0	85 0	12 0	12 0
<b>Sub-montane—</b>																										
Umbatta	20 0	20 0	26 0	24 0	...	...	10 0	10 0	20 0	20 0	16 0	16 0	...	...	10 0	10 0	32 0	32 0	32 0	32 0	...	...	120 0	120 0	13 0	13 0
Lodhiana	23 0	22 0	37 0	36 0	...	...	10 0	10 0	28 0	28 0	20 0	20 0	...	...	18 0	18 0	31 0	31 0	32 0	32 0	...	...	110 0	110 0	12 8	12 8
Jalandhar	22 0	21 0	32 0	32 0	...	...	8 0	8 0	26 0	26 0	20 0	20 0	...	...	13 0	13 0	28 0	28 0	30 0	30 0	...	...	100 0	100 0	13 0	13 0
Hoshiarpur	22 0	20 0	33 0	33 0	...	...	10 0	10 0	28 0	28 0	20 0	20 0	...	...	24 0	24 0	31 0	30 0	30 0	30 0	...	...	100 0	100 0	13 0	13 0
Gurdaspur	22 0	22 0	28 0	28 0	...	...	12 0	12 0	18 0	18 0	14 0	14 0	...	...	12 0	12 0	25 0	24 0	24 0	22 0	...	...	120 0	120 0	12 0	12 0
Amritsar	21 0	21 0	31 0	30 0	...	...	10 0	10 0	25 0	25 0	15 0	15 0	...	...	23 0	23 0	28 0	28 0	24 0	27 0	...	...	90 0	90 0	13 0	13 4
<b>Hills—</b>																										
Simla	14 0	14 0	20 0	20 0	...	...	8 0	8 0	15 0	15 0	11 0	11 0	...	...	8 0	8 0	19 0	18 0	20 0	20 0	...	...	60 0	60 0	8 0	8 0
Kangra	19 0	19 0	28 0	28 0	...	...	13 0	12 0	14 0	14 0	10 0	10 0	...	...	8 0	8 0	20 0	20 0	23 0	24 0	...	...	100 0	100 0	10 0	10 0
<b>North-western—</b>																										
Sialkote	22 0	21 0	40 0	36 0	...	...	10 0	10 0	30 0	30 0	28 0	28 0	...	...	20 0	18 0	30 0	28 0	20 0	22 0	...	...	160 0	160 0	13 0	13 0
Gujranwala	21 0	20 0	38 0	36 0	...	...	10 0	10 0	27 0	27 0	20 0	20 0	...	...	20 0	20 0	29 0	29 0	21 0	21 0	...	...	105 0	105 0	13 0	13 0
Querat	23 0	21 0	34 0	33 0	...	...	10 0	10 0	26 0	26 0	24 0	24 0	...	...	14 0	12 0	27 0	26 0	24 0	24 0	...	...	120 0	120 0	14 0	14 0
Ilhelum	24 0	23 0	32 0	34 0	...	...	10 0	10 0	25 0	25 0	24 0	24 0	...	...	16 0	16 0	27 0	27 0	25 0	25 0	...	...	160 0	160 0	14 0	14 0
Rawalpindi	22 0	21 0	40 0	39 0	...	...	12 0	10 0	40 0	37 0	18 0	18 0	...	...	16 0	16 0	25 0	27 0	24 0	26 0	...	...	80 0	80 0	13 4	13 8
Rawla	22 0	21 0	43 0	37 0	...	...	10 0	10 0	40 0	40 0	14 0	14 0	...	...	17 0	15 0	23 0	23 0	33 0	33 0	...	...	100 0	100 0	11 0	11 0
Peshawar	22 0	21 0	47 0	40 0	...	...	17 0	10 0	44 0	40 0	15 0	15 0	...	...	16 0	16 0	24 0	22 0	32 0	32 0	...	...	100 0	100 0	37 0	37 0
Kohat	22 0	22 0	44 0	46 0	...	...	17 0	13 0	...	...	32 0	32 0	...	...	...	...	22 0	22 0	32 0	29 0	...	...	110 0	110 0	60 0	60 0
<b>Western—</b>																										
Shahpur	24 0	22 0	35 0	33 0	...	...	9 0	9 0	22 0	22 0	26 0	26 0	...	...	20 0	20 0	31 0	31 0	20 0	20 0	...	...	240 0	240 0	13 0	13 0
Ilmag	26 0	21 0	31 0	31 0	...	...	8 0	8 0	24 0	24 0	16 0	16 0	...	...	24 0	22 0	20 0	20 0	20 0	20 0	...	...	240 0	240 0	12 0	12 0
Mooltan	26 0	16 0	26 0	24 0	...	...	10 0	10 0	20 0	20 0	18 0	18 0	...	...	20 0	20 0	22 0	22 0	21 0	24 0	...	...	100 0	100 0	13 0	13 0
Banna	28 0	30 0	40 0	40 0	...	...	10 0	10 0	26 0	26 0	20 0	20 0	...	...	20 0	20 0	32 0	32 0	32 0	34 0	...	...	70 0	70 0	40 0	40 0
D. T. Khan	21 0	20 0	25 0	24 0	...	...	7 0	7 0	25 0	25 0	22 0	22 0	...	...	8 0	8 0	20 0	20 0	17 0	16 0	...	...	112 0	112 0	42 0	42 0
Muzaffargarh	18 0	18 0	27 0	25 0	...	...	8 0	8 0	17 0	17 0	17 0	17 0	...	...	17 0	15 0	20 0	20 0	17 0	16 0	...	...	110 0	110 0	41 0	41 0
D. G. Khan	17 0	16 0	24 0	23 0	...	...	8 0	8 0	23 0	23 0	20 0	20 0	...	...	16 0	16 0	21 0	21 0	17 0	16 0	...	...	125 0	125 0	26 0	26 0
<b>Sind and Baluchistan—</b>																										
Karachi	12 0	12 0	17 0	15 0	...	...	10 0	10 0	15 0	15 0	14 0	13 0	...	...	...	...	18 0	17 0	16 0	16 0	...	...	90 0	90 0	14 0	14 0
Hyderabad (Gudu Bander)	12 8	12 8	15 8	15 8	...	...	9 8	9 8	18 8	18 8	13 0	13 0	...	...	...	...	15 0	15 0	...	...	...	...	160 0	160 0	11 0	11 0
Thar and Parkar (Umarkot)	13 8	13 8	...	...	...	...	10 4	10 4	...	...	13 0	13 0	...	...	...	...	...	...	...	...	...	...	160 0	160 0	12 8	12 8
Sukkur	14 0	14 0	21 0	21 0	...	...	10 0	10 0	20 0	20 0	19 0	18 0	...	...	...	...	19 0	19 0	...	...	...	...	140 0	140 0	11 0	11 0
Shikarpur	12 0	12 0	19 0	18 0	...	...	9 0	9 0	19 0	19 0	19 0	19 0	...	...	...	...	19 0	19 0	...	...	...	...	160 0	160 0	11 0	11 0
Upper Sind Frontier	13 0	12 8	18 8	18 8	...	...	9 0	9 0	22 0	22 0	19 0	19 0	...	...	...	...	19 0	19 0	...	...	...	...	160 0	160 0	11 0	11 0
Quetta	13 2	12 14 1/2	15 0	15 0	...	...	7 10 1/2	7 10 1/2	16 0	16 0	...	...	...	...	...	...	25 0	21 1 1/2	19 0	18 0	...	...	58 0	58 0	8 0	8 0



## RETAIL PRICES FOR THE 1st HALF OF SEPTEMBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHHOLU ( <i>Sorghum vulgare</i> ).		BAJRA OR CUMBU ( <i>Pennisetum typhoides</i> ).		MANUA OR KAGI ( <i>Eleusine indica</i> ).		KANGNI OR KAKUN, MILLET ( <i>Setaria italica</i> ).		GRAM, CHENNA, CHOLA, KADALAY OR KURAGA ( <i>Cicer arvense</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARRAR, OR UPAR, CADIAN PEA ( <i>Cajanus indicus</i> ).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
Madras—																										
Malabar Coast—																										
Malabar	8 10	8 10	...	...	11 13	10 10	12 10	11 5	...	...	...	...	20 6	19 5	...	...	...	...	...	...	...	...	196 2	196 2	11 11	11 11
S. Canara	8 2	8 2	...	...	10 10	10 10	11 5	...	...	...	...	...	19 5	19 5	...	...	...	...	...	...	...	...	128 13	128 13	12 5	12 5
South, central—																										
Coimbatore	11 2	11 8	...	...	12 3	12 3	13 2	13 2	22 10	21 11	23 14	23 14	26 3	26 3	...	...	...	...	...	...	...	...	133 10	133 10	12 11	12 11
Nilgiris	10 11	10 11	...	...	9 10	9 10	10 6	10 6	20 0	20 0	16 13	16 13	20 3	20 3	...	...	...	...	...	...	...	...	161 13	161 13	10 2	10 2
Salem	10 13	10 13	...	...	11 13	11 13	13 3	13 3	29 2	29 2	26 3	26 3	30 13	30 13	...	...	...	...	...	...	...	...	186 10	186 10	9 3	9 3
Central—																										
Bellary	13 6	13 6	...	...	11 13	12 3	13 8	13 8	28 10	28 10	21 10	21 10	33 0	33 0	...	...	...	...	...	...	...	...	97 3	97 3	11 14	11 14
Anantapur	11 8	11 8	...	...	12 13	12 13	14 0	14 0	31 6	31 6	25 6	25 6	32 0	32 0	...	...	...	...	...	...	...	...	194 6	194 6	11 5	11 5
Cuddapah	12 8	12 8	...	...	11 10	11 10	12 8	12 8	23 11	23 11	22 8	22 8	31 8	31 8	...	...	...	...	...	...	...	...	140 0	140 0	12 2	12 2
Kurnool	11 6	11 6	...	...	10 11	10 11	11 6	11 6	25 11	25 11	22 8	22 8	31 8	31 8	...	...	...	...	...	...	...	...	142 14	142 14	11 5	11 5
East Coast, north—																										
Ganjam	7 2	7 2	...	...	9 8	9 8	10 0	10 0	...	...	...	...	17 5	16 6	...	...	...	...	...	...	...	...	167 11	167 11	12 13	12 13
Vissapattam	10 13	11 8	...	...	9 8	9 8	10 11	11 5	22 11	22 2	27 11	27 11	20 3	23 3	...	...	...	...	...	...	...	...	116 10	116 10	11 11	11 11
Godavari	10 6	10 6	...	...	13 14	14 6	15 0	15 0	23 0	24 0	21 2	22 0	21 13	23 11	...	...	...	...	...	...	...	...	243 0	243 0	12 0	12 0
East Coast, central—																										
Kanara	10 6	10 6	...	...	11 8	11 8	12 2	12 2	19 0	19 0	...	...	23 13	23 13	...	...	...	...	...	...	...	...	170 2	170 2	13 3	13 3
Nellore	11 8	11 0	...	...	13 5	13 11	14 5	13 13	22 11	22 11	...	...	27 13	27 13	...	...	...	...	...	...	...	...	93 5	93 5	12 18	12 18
East Coast, south—																										
Madras	10 13	10 13	...	...	11 11	11 13	12 13	12 13	18 11	16 6	7 2	9 3	26 0	26 0	...	...	...	...	...	...	...	...	99 6	99 6	12 5	12 5
Chingleput	9 6	9 6	...	...	12 11	12 11	13 10	13 10	...	...	...	...	24 11	24 11	...	...	...	...	...	...	...	...	122 8	122 8	12 6	12 6
N. Arcot	9 6	9 6	...	...	11 10	12 3	13 3	13 3	...	...	24 13	24 13	30 13	29 2	...	...	...	...	...	...	...	...	194 6	194 6	11 5	11 5
S. Arcot	8 10	8 10	...	...	13 2	13 2	13 10	13 10	20 3	20 3	24 10	24 10	23 14	23 14	...	...	...	...	...	...	...	...	209 0	209 0	11 11	11 11
Tanjore	8 13	8 13	...	...	13 11	13 11	13 10	13 10	20 11	20 11	30 8	30 8	29 8	27 3	...	...	...	...	...	...	...	...	166 3	166 3	12 6	12 6
Tiruchinopoly	8 14	8 14	...	...	12 10	12 3	13 2	12 11	22 6	22 6	32 14	32 14	27 8	26 3	...	...	...	...	...	...	...	...	143 6	143 6	12 3	12 3
South—																										
Tinnevely	8 8	8 8	...	...	11 2	11 2	12 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33 5	33 5	14 13	14 13
Madras	9 11	10 2	...	...	12 3	12 10	12 11	13 2	24 5	24 5	20 10	...	24 13	24 13	...	...	...	...	...	...	...	...	136 2	140 14	13 10	13 10
Myore—																										
Myore	10 0	10 0	10 4	10 0	9 8	9 8	10 4	10 4	28 11	27 8	18 0	18 0	30 0	30 0	...	...	...	...	...	...	...	...	87 0	84 0	12 0	12 0
Bangalore	10 8	10 8	11 8	11 8	9 8	9 8	10 8	10 8	22 0	21 0	...	...	32 0	33 0	...	...	...	...	...	...	...	...	84 0	84 0	9 4	9 4
Kolar	11 0	11 0	10 0	10 0	10 8	10 8	12 0	12 0	...	...	...	...	44 0	43 0	...	...	...	...	...	...	...	...	132 0	132 0	9 8	9 8
Tumkur	11 0	11 0	10 0	10 0	10 8	10 8	12 0	12 0	...	...	...	...	48 0	48 0	...	...	...	...	...	...	...	...	144 0	144 0	9 0	9 0
Hassan	11 0	11 0	10 0	10 0	11 0	11 0	13 0	13 0	...	...	...	...	46 0	46 0	...	...	...	...	...	...	...	...	130 0	130 0	9 0	9 0
Kadur	10 0	10 0	11 0	11 0	12 0	12 0	13 0	13 0	...	...	...	...	40 0	40 0	...	...	...	...	...	...	...	...	96 0	96 0	8 0	8 0
Shimoga	11 9	11 9	12 10	12 10	10 8	10 8	14 11	14 11	31 10	31 10	...	...	44 2	44 2	...	...	...	...	...	...	...	...	240 0	240 0	8 0	8 0
Chitaling	13 0	12 0	15 0	14 0	11 0	11 0	13 0	13 0	32 0	32 0	30 0	30 0	48 0	48 0	...	...	...	...	...	...	...	...	480 0	480 0	8 6	8 6
Coorg—																										
Coorg	9 0	9 0	8 0	8 0	11 8	11 8	12 8	12 8	...	...	...	...	30 0	33 8	...	...	...	...	...	...	...	...	110 0	110 0	9 0	9 0
Aden	8 0	8 0	...	...	6 3	6 3	8 0	8 0	10 3	10 3	9 4	9 4	...	...	...	...	...	...	...	...	...	...	65 5	65 5	32 0	32 0

\* Not sold.

GOVERNMENT OF INDIA.

HOME DEPARTMENT.

SCHOOL FOR MODERN ORIENTAL STUDIES ESTABLISHED BY THE IMPERIAL INSTITUTE OF THE UNITED KINGDOM, THE COLONIES AND INDIA IN UNION WITH UNIVERSITY COLLEGE AND KING'S COLLEGE, LONDON.

INDIA OFFICE,  
London, 22nd August 1889.

*Public (Educational).*  
*No. 89.*

His Excellency the Most Honourable the Governor General of India in Council.

MY LORD MARQUIS,—I transmit, for the information of Your Excellency in Council, copy of a letter from the Imperial Institute, regarding a School for Modern Oriental Studies established by the Governing Body of that Institute.

2nd July 1889.

2. Copies of the printed statement of particulars referred to in Sir F. A. Abel's letter are also forwarded.

I have the honour to be,

MY LORD MARQUIS,

Your Lordship's most obedient, humble Servant,

CROSS.

No. <sup>20</sup>/<sub>14</sub>, dated 1, Adam Street, Adelphi, W.C., 2nd July 1889.

From—SIR F. A. ABEL, Esq., Secretary of the Imperial Institute of the United Kingdom, the Colonies and India,

To—The Under-Secretary of State for India, India Office.

I have received the instructions of His Royal Highness the President of the Institute to request that you will be so good as to bring to the notice of the Secretary of State for India in Council the accompanying statement of particulars respecting a "School for Modern Oriental Studies" which has been established by the Governing Body of the Imperial Institute, in co-operation with the Councils of University College and King's College, London, with the object of supplying the requirements of those seeking official employment, and of officials holding appointments, in connection with which a practical knowledge of one or other of the Modern Oriental Languages is indispensable or desirable:

It has been represented to the Governing Body of the Institute that the tuition and facilities to be afforded by this School, which it is intended should correspond in character to those provided by important State Modern Oriental Schools in Germany, France, and Austro-Hungary, will be, in many directions, of great assistance and value, not only to those seeking employment or holding appointments in the Indian Civil Service, but also to natives.

The languages to be dealt with in the School comprise, in Division I. Sanscrit, Bengali, Hindi, Hindustani, Tamil, Telugu, Punjabi, Pali, Marathi, Gujarati, Arabic and Persian; and, in Division II. Colloquial Arabic, Chinese, Burmese, Modern Greek, Colloquial Persian, Japanese, Russian, Turkish, Malay, and Swahili.

I am instructed to express a hope that Lord Cross may deem it desirable to cause measures to be taken for officially directing the attention of the Government of India to the existence of the new school of Modern Oriental Studies, and to afford it such official recognition as may be in his power to bestow.

**School for Modern Oriental Studies established by the Imperial Institute of the United Kingdom, the Colonies and India in union with University College and King's College, London.**

The commercial and official Classes in the United Kingdom, whose pursuits entail either temporary residence in, or visits to, Oriental Countries and communion or correspondence with the natives of those Countries, have long experienced the want of facilities which might be afforded by a sufficiently comprehensive public Institution, where a practical and colloquial acquaintance with the more important Modern Oriental Languages might be acquired.

In France, Germany and Austria-Hungary, there exist Institutions of magnitude and importance, for affording instruction in the spoken and written Oriental dialects and in matters relating to the history, commerce and political economy of the Countries in which those languages are spoken.

In France, the School of Living Oriental Languages, which was founded nearly 100 years ago, receives from the State the free use of a large building and a grant of over £6,000 per annum; gratuitous instruction is there given in the chief Modern Oriental Languages, and a commercial section has recently been added to it by the Minister of Public Instruction.

The Imperial Oriental Academy of Vienna has long been of world-wide celebrity and has greatly contributed to the extension of commerce in Austria-Hungary, whilst in Berlin, the Imperial German School of Living Oriental Languages, established a year ago upon a very important footing, has already received considerable development. This school is supported by an annual subvention of £3,600, and the tuition there is entirely gratuitous.

Although the scope of action of the Imperial Institute, as defined by its Charter, does not embrace the exercise of actual educational functions, its Governing Body has considered that the creation and development of an organisation for providing, in the United Kingdom, the important aid to the Official and Commercial sections of the community which is furnished to Continental Nations by such establishments as above named, might prove a work of considerable utility.

There have existed at University College and at King's College, since their foundation, Professorships of certain Oriental Languages; the Indian School of University College on the one hand, and the Oriental section of King's College on the other, have accomplished useful work in the preparation of candidates for the Indian Civil Service and other Government Departments, by affording facilities for the study of some of the Eastern Languages.

The Committee of the Institute, having met with a cordial response from the Councils of the two Colleges, to a proposal to consolidate the work of this nature now being performed there, and to bring it into harmonious working with a scheme for affording practical instruction in other important Oriental Languages, now desire to direct attention to the results of a careful consideration of the whole subject by a Special Committee, appointed by them for that purpose, which includes representatives of the Councils of University and King's Colleges, and of which the following are the Members:

SIR FREDERICK ABEL, C.B., D.C.L., D.Sc., F.R.S. (*Chairman*).

COL. SIR EDWARD BRADFORD, K.C.S.I.

SIR FRANCIS DILLON BELL, K.C.M.G., C.B.

COL. SIR CHARLES WILSON, R.E., K.C.B., K.C.M.G.

SIR THOMAS WADE, G.C.M.G., K.C.B.

MAJ.-GENL. SIR FREDERIC GOLDSMID, K.C.S.I., C.B.

SIR PHILIP MAGNUS.

MAJOR C. M. WATSON, R.E., C.M.G.

SIR GEORGE YOUNG, Bart., LL.D. }

PROFESSOR HENRY MORLEY, LL.D. }

THE REV. HENRY WACE, D.D. }

PROFESSOR R. K. DOUGLAS }

Nominated by the Council  
of University College.

Nominated by the Council  
of King's College.



Arrangements have been completed by this Committee and approved of by the Governing Bodies of the Imperial Institute and of the two Colleges, for the organisation of a School in London, designed both for giving instruction in Modern Oriental Languages and also for the pursuit of studies relating to the history, literature, commercial and physical geography, political economy and the natural and industrial resources of the Countries and Districts in which the various languages are used.

It is in contemplation to arrange for the delivery of Special Lectures or courses of Lectures from time to time, in connection with the School, by Experts or Specialists, in any of the foregoing subjects:

This School will be carried on under the immediate direction of the Committee above specified.

The classes which the "School of Modern Oriental Studies" comprises, are divided under two Heads:

**DIVISION I.** includes classes for all Oriental Languages especially required by Students qualifying for examinations for the Indian Civil Service, the instruction being of the same character as that provided for some time past at University College and at King's College.

These classes will, from the commencement of the AUTUMN TERM of 1889, be continued at University College and will be conducted under regulations common to the other classes which combine with them to constitute the General School.

This division includes instruction in Sanscrit, Bengali, Hindi, Hindustani, Tamil, Telugu, Punjabi, Pali, Marathi, Gujarati, Arabic and Persian.

**DIVISION II.** consists mainly of classes for Modern Oriental Languages other than the Indian Languages.

The courses of tuition will be of a practical rather than of an academic character; they will have particular reference to commercial and official requirements and to the facilitation of colloquial intercourse with natives of Oriental Countries.

It is in contemplation, so soon as the number of Students warrants the expenditure, to secure the services of native readers and teachers of conversation in connection with the classes of this Division.

The Languages to be taught in Division II. comprise Colloquial Arabic, Modern Greek, Colloquial Persian, Russian, Turkish, Chinese, Burmese, Japanese, Malay and Swaheli.

The classes under this Division will be conducted at King's College, where arrangements will also be made for the establishment of evening classes.

*The names of Instructors and the places where various classes will be held are given below:*

There will be three terms, of about ten weeks, in each year, as follows:

AUTUMN TERM—commencing about the beginning of October.

SPRING TERM—commencing about the middle of January.

SUMMER TERM—commencing early in May.

**The School will open with the Autumn Term of 1889.**

A fee of THREE GUINEAS per term will have to be paid in advance by each Student for each Language taken up for instruction. This payment will entitle the Student to the use, within the colleges, of text books, dictionaries, and works of reference required in connection with the particular Language taught, and to the use of all the facilities which it is proposed to secure in the development of the School.

Accommodation will be provided to enable Students to pursue their studies at hours when the classes are not held.

The Libraries of both Colleges will be opened to Students in any of the classes of the School, during the usual hours of study.

Intending Students should communicate with the ORGANISING SECRETARY at the Offices of the IMPERIAL INSTITUTE, 1, ADAM STREET, ADELPHI, LONDON, W.C., where the registration of Students will take place, and where all information regarding the School will be supplied.

F. A. ABEL,

*Secretary of the Imperial Institute.*

June 1889.

*DIVISION I.*

HELD AT  
UNIVERSITY COLLEGE, LONDON.

Languages.	Names of Professors or Lecturers.
SANSKRIT . . . . .	C. BENDALL.
BENGALI . . . . .	J. F. BLUMHARDT.
HINDI . . . . .	J. F. BLUMHARDT.
HINDUSTANI . . . . .	J. F. BLUMHARDT.
TAMIL . . . . .	J. BRADSHAW.
TELUGU . . . . .	
PUNJABI . . . . .	
PALI . . . . .	T. W. RHYS DAVIDS, LL.D. Ph.D.
MARATHI . . . . .	H. CHINTAMON.
GUJARATI . . . . .	S. A. KAPADIA, M.D., L.R.C.P.
ARABIC . . . . .	C. RIEU, Ph.D.
PERSIAN . . . . .	H. A. SALMONE.
	C. RIEU, Ph.D.

*DIVISION II.*

HELD AT  
KING'S COLLEGE, LONDON.

Languages.	Names of Professors or Lecturers.
COLLOQUIAL ARABIC . . . . .	The REV. DR. J. L. SABUNJIE.
CHINESE . . . . .	R. K. DOUGLAS.
BURMESE . . . . .	GENERAL ARDAGH.
MODERN GREEK . . . . .	M. CONSTANTINIDES.
COLLOQUIAL PERSIAN . . . . .	SIR FREDERIC GOLDSMID.
JAPANESE . . . . .	F. V. DICKINS, M.B., B.Sc.
RUSSIAN . . . . .	N. ORLOFF, M.A.
TURKISH . . . . .	CHARLES WELLS, Ph.D.
MALAY . . . . .	
SWAHELI . . . . .	ARCHDEACON FARLER.*

\* The Committee is in communication with this gentleman.

C. J. LYALL,  
*Offg. Secretary to the Government of India.*

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Correspondence relating to the loss of the *S.S. Vaitarna* off the Bombay Coast in November 1888.

No. 272-S., dated Simla, the 19th June 1889.

From—The Meteorological Reporter to the Government of India,  
To—The Secretary to the Government of India, Revenue and Agricultural Department.

I have the honour to submit the following reply to the various charges which have been made against the Meteorological Department in connection with the loss of the *Vaitarna*, in accordance with the request contained in your No. 321-M., dated Simla, the 6th May 1889.

2. The following appear to be the whole of the points and issues which require consideration and answer. The Court of Enquiry calls the attention of the Government to the following defects:

- (a) The want of a proper system of meteorological observations on the Coast of India.
- (b) The want of a proper system of exhibiting storm-warning signals on the Coast of India.

It also records the opinion—

- (c) That if a proper storm-warning system had been in force with communication to most of the northern ports, intimation could have been conveyed in time to have enabled the *Vaitarna* to avoid the cyclone.

In addition to these three points, the following are suggested by the evidence and subsequent discussion on the evidence:

- (d) Whether the Simla Office with the system then in force gave as full warning and information to merchants and shippers in Bombay of the storm in question as could reasonably have been expected.
- (e) Whether the Bombay storm-warning system then in operation was defective and unsatisfactory, and also to whom the blame for this state of affairs should be assigned.

3. My reply may be summed up as follows:

- (a) That there is a fairly complete and satisfactory system of observations along the Coast of India, but the Kattiawar Coast is imperfectly represented.
- (b) That there is a proper and satisfactory system for warning at least three-fourths of the Coast of India, but that the Bombay system was at the time of the *Vaitarna* disaster defective. The India Meteorological Department was, however, at the time endeavouring to remedy the defect.
- (c) That if a proper and complete system for warning the Bombay (including the Kattiawar) Coast had been in force at the time, it almost certainly would not have enabled the *Vaitarna* to weather the storm, as she was too lightly built to encounter a cyclonic storm and was navigating a portion of the Coast where there is no shelter, and the Captain was apparently more or less ignorant of the laws of storms. It is, moreover, doubtful whether any system of storm signals would be of much use to vessels of the *Vaitarna* build navigating the Kattiawar Coast.
- (d) The Simla Office gave as full warning of the position and character of the storm to the West Coast ports by means of signal and telegrams as could reasonably be expected, more especially when the

circumstances under which the Simla Office was performing that duty at that time are taken into consideration.

- (e) Neither the Bombay authorities nor Mr. Chambers ever called the attention of the Meteorological Department or the Government of India to the defects of the Bombay meteorological and storm-warning services so far as the Kattiawar Coast is concerned, and hence they are in part, if not chiefly, responsible for the continuance of the defect.

4. As a full explanation is desired, I will deal with each of these five points *seriatim*, and finally give a full statement of the action taken by the Simla Office to warn the West Coast ports during the progress of the storm, in order to give as complete a reply as possible to the fourth and most important issue. Before doing so I have to point out that the enquiry of the Court appears to me to have been imperfectly conducted and that the actual wording of its conclusions goes far beyond the scope of this enquiry. It neither summoned Mr. Hutchinson, Meteorological Reporter for Western India, nor Mr. Dallas, Assistant Meteorological Reporter to the Government of India, who hoisted the signals during the storm and was present in Bombay at the time and ready to give evidence; and bases the whole of its conclusions on the meteorological aspect of the enquiry upon the evidence of a single witness, who in no way represented the Meteorological Department. The enquiry was hence one-sided, and in my opinion failed to point out the more striking and most easily remedied defects of the Bombay storm-signal service.

I may also point out that the Government of Bombay concurs in the opinion of the Court that if a proper storm-warning system had been in force with communication to most of the northern ports, intimation could have been conveyed in time to have enabled the *Vaitarna* to avoid the cyclone, and bases its concurrence on statements which, to say the least, do not represent facts. The Bombay Government says that it appears from a report submitted by Mr. Hutchinson, Meteorological Reporter for Western India, that merchants and shippers were not informed at the time the vessel left Bombay of the existence of a cyclonic storm on the Kattiawar Coast. The facts are that the storm signals were flying at Bombay when the *Vaitarna* left that port (intimating to merchants, shippers, port authorities, &c., that there was a cyclonic storm in the Arabian Sea at some distance from the Bombay Coast), and that there was also at that time no cyclonic storm in existence on or off the Kattiawar Coast.

5. In reply to the first issue [(a) paragraph 2] it is sufficient to point out that there was at the time the Court sat a very fairly complete and well-organized system of meteorological observation over the whole of India, coast and inland. Mr. Chambers' sole suggestion in this respect, *vide* page 9 of report of the Court, is to establish an Observatory at Verawal, in addition to the 162 already in existence. So far as I can judge, this is the sole evidence for the recommendation of the Court. It might properly have pointed out the local deficiency in Kattiawar. Instead of that it condemned the whole system without making any enquiry into its character and extent.

6. With respect to the second criticism of the Court of Enquiry [(b) paragraph 2], it is presumed that the Court did not intend deliberately to ignore the fact that the Meteorological Department has, under instructions from the Government of India, devoted much time and labour during the last three years to the perfecting of the Bengal storm-warning system and the introduction of a satisfactory system suited to local requirements for warning the Burma and Madras ports. What the Court apparently intended to say was that the Bombay system, as in force at the time of the *Vaitarna* disaster, was defective or not a proper system, by which it perhaps meant that it was not based on correct principles. For this, as I shall show presently, I cannot assume any responsibility.

The opinion of the Court is worded in such a manner that I am unable to infer with certainty what it really means, but assume it is what I have stated above. A warning system had been in operation for the Bombay ports since 1880 administered by Mr. Chambers. The Simla Office took over this work in August 1888, and barely two months' working of the system convinced me

that it was defective and unsatisfactory, and that I ought to take early steps to place it on a proper footing. With this object in view I went to Kurrachee in November and discussed the matter with the Port Officer on the 8th of November, the day on which the storm approached the Kattiawar Coast, and on which the *Vaitarna* probably went down. I sent Mr. Dallas to Bombay early in December, partly with the object of learning from the Port Officer and other authorities their opinions and wishes with respect to an improved storm-signal service. Mr. Dallas was engaged in this work at the very time that the Court sat. One of the strangest features of this enquiry (and which seems to me to call for explanation) is that Mr. Dallas, who has had many years' experience of working a storm-signal service in England as well as in India, and who actually gave the orders for hoisting the signals on the West Coast during the *Vaitarna* storm and was known to be present in Bombay at the time of the enquiry with the object of improving the local meteorological service, was not called by the Government Solicitor for examination before the Court. The Court might have given the most valuable assistance to the Meteorological Department if it had enquired fully into the working of the Bombay storm-warning system, pointed out its defects and suggested necessary or desirable improvements, and it would thus have strengthened the hands of the Meteorological Department in carrying out the improvements it was actually trying to effect at the time.

In connection with this, I wish to protest against the theory that the Imperial Meteorological Department should ascertain and provide for all local requirements independently of any action of the Local Government or local authorities. My own opinion is that, while the Meteorological Department should endeavour to ascertain and carry out any improvements necessary to make its work more effective, it should as a practical Department rely for the direction of its improvements mainly upon the expressed wants of local authorities and the public. In other words, it should, for example, give the Government or public the information it requires and is prepared to use, and not the information that the Department thinks it ought to require. A recommendation for the improvement of the local meteorological service made by a competent local authority would frequently enable the Meteorological Department to ask for and obtain the necessary means to enable it to remedy the defects pointed out by that authority.

The responsibilities of a storm warning Department are, I may point out, so great that its natural tendency is to endeavour to extend the field of observation upon which it bases its action. By properly selected extension the work of storm warning becomes easier and more certain, and the responsibility and anxiety inherent to the work is diminished. It is hence evident that any extension of the system of observations for storm-warning purposes established in India depends really upon the willingness of the Government of India or local authorities to provide the funds necessary for the cost of such extensions.

The Meteorological Department has, for example, frequently pointed out that the Bay of Bengal storm-warning work could be much more effectively performed and that earlier and more certain warning of storms could be given if Port Blair and the Eastern Channel Light Vessel at the entrance to the Hooghly were connected telegraphically with the mainland. Neither the Government of India nor the local authorities are willing to provide the funds. It would be equally easy for me to suggest that the extension of a proper storm-warning system to the Kattiawar Coast requires that telegraph lines should be laid down connecting Dwarka and Cutch Mandvi with the nearest telegraph offices, but suggestions of this kind are impracticable and valueless unless at the same time a feasible method of providing the funds necessary for carrying out the suggestions be indicated.

These remarks will perhaps indicate the difficult position in which the Department is placed in such matters and also show that the intelligent expression of local bodies, *e.g.*, Local Governments, Chambers of Commerce, &c., might be a safer and better guide to useful and realisable extensions of the practical work of the Department than its own wishes and suggestions.

I have already stated the action I took in the year 1887 to place the Bombay storm-warning system on a proper footing. The Government of India is hence in a position to decide whether my action in visiting Bombay in 1887 (one result of which was Mr. Chambers' letter published in the Appendix) and my action in

November and December 1888 in visiting Kurrachee and sending Mr. Dallas to Bombay are sufficient proofs or not that I was doing as much as might reasonably be expected from me as Head of the Department to improve the local storm-warning system in accordance with local wants and requirements. As part of the same subject, the Government of India will perhaps also take into its consideration the fact that neither the whole-time Bombay Reporter nor any one else pointed out to me during the whole of this period in any official communication the deficiency in the Bombay meteorological or storm-warning system, so far as Kattiawar was concerned.

7. The statement of the Court that if a proper storm-warning system had been in force, with communication to most of the northern ports, intimation could have been conveyed in time to have enabled the *Vaitarna* to avoid the cyclone, is apparently based solely on a remark of Mr. Chambers, that it would have been possible with a proper storm-signal system to have warned the Kattiawar Coast on the 8th November. The 8th covers a period of twenty-four hours, and the important point in such a matter is the hour of that day and not the day when the signals could have been hoisted. The Court apparently asked no question on this most important point, and the vague statement of a single witness was utilized by at least one Bombay newspaper, in order to make a serious charge against the Department and the Government of India, *viz.*, of being virtually the cause of the loss of the *Vaitarna*. This is the most important issue raised by the report of the Court of Enquiry.

So far as I can reasonably judge from my experience of storm-warning work, if there had been an Observatory at Verawal and another at Dwarka or Mandvi and storm-signal arrangements in complete working order at the Kattiawar ports, it would have been possible to have hoisted warning signals at the Kattiawar ports intimating the existence of a disturbance at some distance to the south-west of the Kattiawar Coast about noon of the 8th, and to have hoisted danger signals intimating the early advance of a cyclonic storm about 4 or 6 P.M. of the same day. The *Vaitarna* left Cutch Mandvi at 8 A.M. and passed Dwarka at noon. Hence under a practically perfect system the Captain might have received general intimation of stormy weather about noon or about the time he began to advance along the West Kattiawar Coast. Mr. Moir, Manager of the line to which the *Vaitarna* belongs, thus describes that Coast: "There is no harbour between Mandvi and Bombay into which the *Vaitarna* could have run. They are all open roadsteads: Mandvi itself is an open roadstead." Hence it is certain, if this evidence be accepted, that even if the Kattiawar ports had been warned at noon of the 8th, the *Vaitarna* would still have been obliged to have remained out in the open sea, and in the absence of definite instructions to the Captain in which direction to run to avoid the storm (such as are not given by any existing storm-warning system), he would almost certainly have proceeded in the same course as he did and with the same result. For in such matters the knowledge and judgment of the Captain counts for a good deal and cannot be entirely superseded by the general warning of a distant signal. That this inference is almost certainly correct is proved by the fact that the Court concluded from the action of the Captain (and probably rightly, although this is not the opinion of Sir Henry Morland) that he was unable to utilize the indications of his barometer and the changes in wind, force, and direction so as to ascertain roughly the bearing of the storm centre and its line of march, and hence decide on the proper course to adopt to avoid the storm. In fact, he simply ran into the advancing storm, and his vessel was overwhelmed by the heavy seas.

The establishment of a proper system such as the Court apparently contemplated would require not merely the establishment of two Observatories—one at Verawal and the other at Dwarka or Cutch Mandvi—and the maintenance of storm-signal stations at Verawal, Porbandar, Dwarka, and Cutch Mandvi (which would involve a comparatively small expenditure), but also the laying down of at least 150 miles of telegraphic lines to connect Dwarka and Cutch Mandvi; and I am informed by the Telegraph Department that they would not pay and that there is no probability of their construction for many years to come.

8. With respect to the fourth issue [(d) paragraph 2], *viz.*, the action of the Simla Office, I have gone carefully through the history of the storm and



also considered the action which Mr. Dallas took (I was absent from Simla at the time as already stated) to warn the Bombay Coast of the storm, and have come to the conclusion that he acted with judgment and great care. I need not repeat the circumstances under which the working of the Bombay storm-signal service was transferred to Simla nor the difficulties under which it had to be carried out, as they have been already fully stated in previous correspondence on the subject.

Mr. Dallas's action is given in detail in paragraphs 10 and 11 in connection with the brief account of the storm.

9. My action in proceeding to Kurrachee in November is sufficient proof that I felt the Bombay warning system was defective at that time. As statements have been made imputing the delay in the removal of this defect to the India Meteorological Department ignoring the representations of Mr. Chambers, it is necessary for me to point out where, in my opinion, blame should really lie.

So far, as I can ascertain from the records of my office, Mr. Chambers never pointed out to Mr. Blanford the absence of observatories or storm-warning stations on the Kattiawar Coast or submitted proposals for their establishment. Shortly after I took over charge from Mr. Blanford (in May 1887) I learnt that the Bombay storm-signal service was not in as efficient and satisfactory state as I thought it ought to be; considering the great importance of Bombay as a seaport on an open coast of a sea exposed to fierce tropical cyclones. At the first opportunity, that is, in October 1887, I went to Bombay and saw Mr. Chambers, discussed with him the unsatisfactory condition of the Bombay storm-warning system, and asked him to submit a scheme for placing it on a satisfactory footing. As the reduction of his appointment was then under consideration, I urged him to study economy as well as efficiency in drawing up his scheme. I enclose a copy of the letter embodying his scheme which he sent to me in November 1887 and of a chart accompanying it (*vide* Appendix A). It shows that Mr. Chambers made absolutely no suggestion at that time for establishing observatories or storm-signal stations on the Kattiawar Coast. There is also no indication in this letter that he at that time recognized the existence of the defects he subsequently pointed out to the Court of Enquiry in December 1888.

He then had several years' experience of the work of warning the Bombay Coast; and yet at that stage when called upon by me, as Head of the Department, in consequence of his own representations of the defective state of the Bombay warning system, to submit a satisfactory scheme which I could recommend to the Government of India, he failed to make any suggestion such as that which he made to the Court and upon which it bases its conclusions that the Meteorological Department had failed to provide a proper storm-warning system for the Bombay Coast. It is one of the most striking cases of a man being wise after the event, that has come within my experience. It is also not a little strange that the Court did not ask Mr. Chambers whether he had ever submitted definite proposals to the Government of India for the establishment of observatories and storm-signal stations on the Kattiawar Coast.

No further correspondence ensued on the subject, and hence this letter represents Mr. Chambers' views from the date of its submission until he ceased to be Reporter on 1st August 1888; that is, when the Simla Office took over charge of the Bombay storm-signal work. Hence Mr. Chambers failed, so long as he was Reporter, to point out the defects of the system so far as the Kattiawar Coast was concerned; and the Simla Office was obliged to take it over with all its defects for which I was in no way responsible, but which I began to try to remedy as soon as I was in a position to do it.

I am, however, not prepared to urge that Government should in its present financial condition spend the large amount required to lay down 150 miles of unproductive telegraph lines in order to protect as far as possible the Kattiawar Coast. It has no ports in which vessels can take shelter during storms, and traffic is suspended for nearly six months of the year (that is, during the whole of the south-west monsoon). Such disasters as the *Vaitarna* can be much more simply and directly avoided by the adoption of Sir Henry

Morland's suggestion that the Government should only permit vessels of suitable build and strength to navigate that part of the Coast and carry passengers. The chief advantage of the extension proposed would be to warn and protect the port towns, but not the shipping off the Coast. Although therefore I do not urge the extension as absolutely necessary, I recommend it strongly to the consideration of the Government of India and the local authorities, as it would undoubtedly enable the Kattiawar Coast to be adequately warned in stormy weather.

10. I have written a history of the storm for publication in the cyclone Memoirs. A careful consideration of the whole of the available data of the storm shows that the account given by Mr. Chambers and accepted by the Court is imperfect :

*1st*—In stating that the cyclonic storm which crossed the Peninsula passed out as a cyclonic storm into the Arabian Sea.

*and*—In suggesting that the cyclonic storm advanced in a definite course over the Arabian Sea during the interval from the 2nd to the 6th.

The real facts, so far as I can judge from the data, were—

*1st*—The cyclonic storm broke up as a definite storm in the Peninsula, and on approaching the West Ghats resolved into a series of eddies which were partially transmitted westwards, the final result being an extension of an area of disturbed weather previously existing in the Arabian Sea.

*and*—In this area of disturbed weather a small cyclonic storm was very slowly generated or developed between the 4th and the 7th, during which period it was, as usually happens in the initial stage of cyclonic storms, nearly stationary.

*3rd*—This storm was of very small extent and of moderate intensity and began to move rapidly on the evening of the 7th to the north-north-east.

These facts are very important for the reason that the indications of squally weather or of an incipient cyclone at distant observing stations are more or less vague and uncertain. Sir Henry Morland, in his able letter, points out clearly the character of the barometric indications—"The barometric indications we have been able to obtain are not such as would have afforded much warning or have led an ordinary ship-master to anticipate the worst kind of weather," and again "there was nothing in the meteorological observations available or which could have been taken on the Continent of India to have justified a prognostication that the cyclone had recurved and would strike the Coast of Kattiawar."

11. The difficulty which Mr. Dallas had in dealing with the facts was as follows :

The Coast observations for some days showed the existence of disturbed weather off the West Coast; but these indications were vague and not sufficient to indicate even with approximate accuracy the nature of the disturbance. In the daily Reports of the period Mr. Dallas described the disturbance as the continuation of the cyclonic storm which crossed the Peninsula. In a memorandum which he drew up when in Bombay, and which was forwarded to the President of the Court, but was not read or accepted as evidence, Mr. Dallas, on the strength of the additional information received up to that date, modified his opinion so far as to suggest that the storm in the Arabian Sea was a secondary or subsidiary storm, a resultant of the primary, but not the direct continuation of it. The indications of the second or subsidiary cyclonic storm only became definite on the morning of the 8th when the storm was approaching the Kattiawar Coast. At that time unfortunately the storm, which was of small extent, was approaching a part of the Coast where there are no observatories. Whoever may be to blame for this, it was certainly not Mr. Dallas.

The first observations which he received showing the character of the disturbance were those sent from Surat and Rajkote on the morning of the 9th, and he then hoisted the signals at the signal stations on the Gulf of Cambay.

The following table shows fully the action Mr. Dallas took in warning the West Coast during the disturbance:

HOISTED.	LOWERED.	Stations warned.	TELEGRAPHIC ORDERS.*	
			To hoist the signal.	To lower the signal.
1st November 1888.	4th November 1888.	Karwar ... Port Officer	Severe cyclonic storm crossing Peninsula from Madras. South-westerly strong winds or gales probable. Hoist signal.	Please lower signal. Lower signal; cyclone passed northward.
		Kumta ... Customs Manager.		
		Cochin ... Port Officer.		
	3rd November 1888.	Calicut ... "		
		Mangalore ... "		
3rd November 1888.	5th November 1888.	Bombay Castle, Port Officer	Shallow cyclonic storm drifting up West Coast and moderate south-east and east gales likely. Hoist signal.	Please lower signal.
		Alibagh ... Head Accountant, Huzar Treasury.		
		Raznagiri ... Sirkarkun in charge of Custom House.		
		Vengorda ... Ditto.		
	4th November 1888.	New Goa ... Director, Meteorological Observatory.		
9th November 1888.		Marmagao ... Chief Engineer and Agent, W. I. P. R.	Moderate cyclonic storm advancing north-east ward across Kattiawar. Hoist danger signal.	Lower signal; cyclone passed inland.
	10th November 1888.	Kurrachee ... Master Attendant		
		Bhavnagar ... State Engineer.		
		Daman ... Governor.		

\* All telegrams sent urgent.

12. In judging of the action of Mr. Dallas, it is most important to act on the principle recognised by Sir Henry Morland in his statement that the evidence placed before the Court of the course and development of the storm was all obtained after its occurrence or was the result of inferences drawn from what did occur. We should place ourselves in his position at the time and having only the information he then had and not to allow any certain knowledge of subsequent facts to bias our judgment. There should also be further taken into consideration, in this special case, the very unsatisfactory character of the Bombay signal service at that time, and the imperfect acquaintance of the Simla Office with the conditions of the West Coast and of the storms of the Arabian Sea (due to the fact that there has been little previous systematic investigation of these storms). It is an open question whether it was desirable to hoist the storm signals at all on the Bombay Coast during the stormy weather of the first week of November 1888 in the Arabian Sea. Mr. Dallas believed at the time it would probably not give strong winds to the ports themselves, although it almost certainly would in the open sea off these ports. He had, however, only the alternative of hoisting no signal at all or of hoisting the only signal the system in force permitted. He adopted the more prudent course (that which, strange to say, the Department is now blamed for not having done) and gave notice to the shippers, merchants and port authorities at Bombay of the existence of this storm by hoisting the storm signals on the 3rd and keeping them up until noon of the 5th. The weather telegrams which were sent daily from Simla at that time and published in the Bombay papers also informed the public of the existence and general character of the storm. The following is a copy of the weather telegrams published in the *Times of India*, on Monday morning, the 5th:

*Extracts from the "Times of India," Monday, November 5th, 1888.*

#### THE WEATHER.

(By telegraph.)

*Simla, November 3rd.*

"The cyclonic storm noticed during the past few days is travelling northward along the West Coast. It has filled up a good deal, but is still well defined, and will probably give gales and rough weather to the Konkan Coast, with rain

there and perhaps in the interior. Further low pressures are developing over the Bay. The wind is cyclonic and strong to a gale on the mid-West Coast. Easterly winds prevail at the central stations; variable elsewhere. Rain has fallen all over the Peninsula; heavily on the East Coast and Ceylon. The weather is fine in Northern and Central India and very unsettled in the south."

*Simla, November 4th.*

"The pressure has fallen a little at Bombay and in Sind and the cyclonic storm has advanced northward to the neighbourhood of Bombay. The pressure has increased elsewhere and is high in Assam. The wind is generally easterly. It blows freshly at some western stations, and a gale is reported from Sholapur. Rain has fallen in Orissa and over the Peninsula; the largest amounts are at Masulipatam and Secunderabad."

Mr. Dallas hence fully warned the Bombay merchants, local authorities, and the public generally of the existence of this storm; and if the *Vaitarna* disaster had not occurred, the probabilities are his action would have been severely criticized by the Bombay press, &c., for unnecessarily alarming the Bombay public and interrupting the trade and work of the port.

Hence after a full consideration of Mr. Dallas's action from a proper and reasonable standpoint, I am strongly of opinion that he acted throughout with judgment and utilized fully all the means at his disposal to warn the Bombay Coast ports of the storm.

It would have been more satisfactory if the Court had examined Mr. Dallas and come to this conclusion. The full explanation I have given will, I venture to hope, prove to the satisfaction of the Government of India that Mr. Dallas not only endeavoured to perform a very onerous duty to the best of his ability under peculiarly difficult conditions, but that, taking into consideration the means at his disposal, he warned the Bombay Coast ports properly and adequately during the *Vaitarna* storm.

13. These remarks are, I trust, sufficient to enable the Government of India to take any action it considers necessary in connection with the enquiry and to deal with the important question, should it ever arise, who was chiefly blamable for the imperfection of the Bombay storm-warning system at the time of the *Vaitarna* disaster.

14. In conclusion, I may state that the Simla Meteorological Office, partly at the instance of the Government of India and partly on its own knowledge of the defects of the Bombay meteorological system, was doing its utmost to remedy the defects before the *Vaitarna* disaster occurred.

The chief defects were—

- (a) The want of a proper local daily weather report.
- (b) The defective character of the Bombay storm-signal service.
- (c) The defective representation of Kattiawar in our meteorological system.

It is sufficient to point out the action of the Department to remedy these defects—

1st—A local daily weather report and chart based on weather telegrams from 41 stations is now published and issued daily to the Bombay public and that practically at no additional cost to the State. This result, I may add, is mainly due to the action and liberality of the Bombay Chamber of Commerce.

2nd—The India Meteorological Reporter commenced to endeavour to remedy the second defect last November and has submitted the complete details of a storm-warning system, the principles of which have been fully approved by the Bombay local authorities and which is now under consideration of the Government of India for adoption.

3rd—The India Meteorological Department, as soon as the third defect was brought to its notice, took practical measures to remedy it so far as it could by making or suggesting arrangements for the establishment of an Observatory at Verawal and storm-signal stations at Verawal and Porbandar. It is not possible to remedy this defect satisfactorily until telegraphic communication has been opened to Dwarka or Mandvi.

No. <sup>139</sup> Met, dated Simla, the 22nd August 1889.  
3-35

From—SIR E. C. BUCK, K.T., Secretary to the Government of India, Revenue and Agricultural Department,

To—The Chief Secretary to the Government of Bombay.

With reference to your letter No. 1469 of the 13th April last, submitting a copy of the Proceedings of the Court of Enquiry on the loss of the steamship *Vaitarna*, I am directed to forward, for the information of His Excellency the Governor in Council, a copy of a report which has been furnished by the Meteorological Reporter to the Government of India, and to communicate the following remarks on the subject.

2. From your letter it is gathered that the Government of Bombay (a) is of opinion that the merchants and shippers were not informed at the time the *Vaitarna* left Bombay of the existence of a cyclone on the Kattiawar Coast; (b) concurs with the Court of Enquiry in thinking that, if a proper storm-warning system had been in force, intimation could have been conveyed in time to have enabled the *Vaitarna* to avoid the cyclone. With regard to the first point, I am to draw attention to Mr. Eliot's statements that on the 5th November, the date on which the *Vaitarna* left the harbour, the storm-signals were flying at Bombay, and that on that date no cyclone was in existence on the Kattiawar Coast. The signals were subsequently taken down, as the storm had dispersed or gone out to sea. On the second point, I am to observe that it is a well known fact that the coasts of Bengal, Madras, and Burma are provided with an elaborate and fairly worked storm-warning system. The Government of India, therefore, presumes that the Court of Enquiry, in calling attention to the want of a proper system of Meteorological observations and signals, meant to confine its condemnation to the state of things on the Western Coast, and more particularly to the absence of storm-warning stations in Kattiawar. The Government of India is prepared to express its concurrence with the Court and the Government of Bombay to this extent, that there were at the time of the enquiry some imperfections in the system of Western India. But it appears to the Government of India that the utmost that could have been done, if there had been most complete communication with the ports on that coast, would have been to fly the general danger-signal at or shortly after noon of the 8th November, that is, probably after the *Vaitarna* left Dwarka, at which place, according to the report of the Court of Enquiry, "the sea was smooth, and there was no indication of a storm." The next port of call was Porbandar, and before he reached there the Captain of the *Vaitarna* must have become fully aware of all that a mere danger-signal could have told him. His Excellency the Governor General in Council is not, therefore, prepared to assent to the conclusion that, under any existing system of storm-signalling, intimation could have been conveyed in time to have enabled the *Vaitarna* to avoid the cyclone. Inland signal-stations could not have helped the Department, and it was not until the afternoon of the 8th November that data existed for even the formation of an opinion that a cyclone was approaching from the south-south-west.

3. His Excellency in Council trusts that the Government of Bombay will be satisfied by Mr. Eliot's report that the Meteorological Department, in the measures which it initiated in 1887 and 1888, took all reasonable precautions not only for the maintenance, but even for the improvement, of the storm-warning system as handed over by the Local Reporter. Any practical suggestions for its further improvement will always be welcomed, and in this connection I am to invite attention to paragraph 14 (2) of Mr. Eliot's letter, and to my letter No. <sup>129</sup> M. of the 18th June last, with the latter of which was forwarded, for the approval of the Government of Bombay, a detailed scheme for the improved storm-warning signal service of the West Coast of India, and to say the Government of India still awaits a reply to this letter. With regard to clause (3), paragraph 14 of Mr. Eliot's letter, I am also to invite attention to my letter No. <sup>129</sup> dated the 1st ultimo, regarding the proposed establishment of an Observatory at Veraval on the Kattiawar Coast.

4. The Government of India will be glad to learn whether His Excellency in Council has taken or proposes to take any measures for the better instruction

of shipmasters in the law of storms, and the regulation of journeys along an unprotected coast by vessels of the light build of the *Vaitarna*.

No. 3778-A., dated Bombay Castle, the 11th September 1889.

From—J. NUGENT, Esq., C.S., Chief Secretary to the Government of Bombay,

To—The Secretary to the Government of India, Revenue and Agricultural Department.

I am directed to acknowledge the receipt of your letter No. 139-3-35 Met., dated 22nd ultimo, and in reply to state that the Government of India have correctly presumed that the Court of Enquiry on the loss of the steamship *Vaitarna* in calling attention to the want of a proper system of meteorological observations and signals meant to confine its condemnation to the state of things on the Western Coast, and more particularly to the absence of storm-warning stations in Kattiawar. Neither the Court of Enquiry nor the Bombay Government had anything to say as regards the storm-warning system in force in Bengal, Madras, and Burma.

2. As regards the remarks made in paragraph 3 of your letter, I am desired to invite the attention of the Government of India to my letter No. 3376, dated 20th ultimo, in which it was stated that this Government approved the arrangements proposed by the Meteorological Reporter to the Government of India for improving the storm-warning system on the West Coast, and with reference to paragraph 3 thereof to state that the officers at Verawal and Porbandar, to whom the storm-warning telegrams should be sent, are the "Vahivatdar Verawal," and the "Port Superintendent, Porbandar." The arrangements regarding the delivery of such telegrams at Dwarka are still under consideration. I am also to state that this Government have no objection to the establishment of an Observatory at Verawal, and that the State of Junagad, to which the Port of Verawal belongs, has agreed to provide the buildings required for the Observatory and to maintain them in proper order.

3. Adverting to paragraph 4 of your letter under reply, I am to invite attention to paragraphs 2 and 3 of my letter No. 3214, dated the 9th ultimo, to the Government of India in the Department of Finance and Commerce, in which information on the points raised in your letter has been supplied.

By order,

J. MUIR-MACKENZIE,

Offg. Secretary to the Government of India.



## GOVERNMENT OF INDIA.

## DEPARTMENT OF FINANCE AND COMMERCE.

## STATISTICS AND COMMERCE.

## Statistics.

## Review of the working of the Indian Companies Act, VI of 1882, during the year 1888-89.

No. 5522, dated Simla, the 25th October, 1889.

RESOLUTION—By the Government of India, Department of Finance and Commerce.

Read the following communications submitting the Reports of Registrars of Joint Stock Companies on the working of the Indian Companies Act, VI of 1882, during the official year 1888-89:

From the Government of Madras, No. 1217, dated the 16th July 1889.

From the Government of Bombay, No. 4817, dated the 5th July 1889.

From the Government of Bengal, Nos.  $\frac{1}{4}$ -2 and  $\frac{1}{4}$ -4, dated the 18th June and 13th August 1889.

From the Government of the North-Western Provinces and Oudh, No.  $\frac{135}{VII-178}$ , dated the 29th May 1889.

From the Government of the Punjab, No. 7, dated the 14th May 1889.

From the Chief Commissioner, Central Provinces, No.  $\frac{129}{374}$ , dated the 17th July 1889.

From the Chief Commissioner, Burma, No.  $\frac{318}{62}$ , dated the 10th May 1889.

From the Chief Commissioner, Assam, No. 5396, dated the 7th September 1889.

From the Secretary for Berar to the Resident at Hyderabad, No. 282-G., dated the 18th July 1889.

From the Resident in Mysore, Nos.  $\frac{3110}{525}$  and  $\frac{3201}{525}$ , dated respectively the 11th September and the 18th July 1889.

RESOLUTION.—At the close of 1887-88 there were 910 joint stock companies in existence in India, registered under the Indian Companies Act. They possessed a total nominal capital of 3,025½ lakhs, the actual (paid-up) capital being nearly 2,233 lakhs. During the year 1888-89, the capital of 32 of these companies was increased nominally by about 45½ lakhs, the actual figures, however, not being reported in most cases; while 112, with a paid-up capital of about 11 lakhs, so far as reported, ceased to work.

The number of companies registered in 1888-89 was 97, with a nominal capital of 178 lakhs; but their paid-up capital cannot be completely stated, the amount of such capital not having been reported in several cases up to the end of the year. The net result at the close of 1888-89 was a total of 895 companies possessing a nominal capital aggregating 3,134 lakhs, and an actual capital, so far as reported, of 2,299½ lakhs.

2. The following table shews the number of companies and the amount of paid-up capital in each of the provinces in the last two years:

PROVINCE.	NUMBER OF COMPANIES.		PAID-UP CAPITAL.		INCREASE OR DECREASE PER CENT. IN 1888-89.		Provincial proportion of paid-up capital to all paid-up capital in 1888-89.
	1887-88.	1888-89.	1887-88.	1888-89.	Number of Companies.	Capital.	
			Rs.	Rs.			Per cent.
Bengal	227	214	9,85,97,905	9,77,87,068	+ 3	— 1	42.5
Bombay	204	213	9,20,82,917	9,87,43,382	+ 9	+ 7	43
Madras	317	260	1,63,99,544	1,67,90,358	— 16	+ 2	7.3
North-Western Provinces and Oudh	52	54	82,11,928	85,55,419	+ 4	+ 4	3.7
Punjab	22	22	32,32,974	35,04,166	Nil	+ 8	1.5
Burma	12	11	12,41,955	11,77,110	— 8	— 5	.5
Central Provinces	3	3	8,72,595	8,77,790	Nil	+ 6	.4
Assam	3	3	—	—	Nil	—	—
Mysore	70	78	26,22,067	25,20,734	+ 14	— 4	1.1
Hyderabad Assigned Districts	—	1	—	10,000	—	—	—
TOTAL	910	895	22,32,61,933	22,99,75,977	— 2	+ 3	100

\* Not reported.

3. The following table shews the division of the aggregate capital among the principal classes of joint-stock enterprise :

COMPANIES.		Number.	Nominal capital.	Paid-up capital.
			Rs.	Rs.
Banking, Loan, and Insurance	Banking and loan ...	314	5,16,75,295	3,27,37,866
	Insurance ...	17	1,35,95,000	21,90,246
	Total ...	331	6,52,70,295	3,49,28,112
Trading	Merchants and traders ...	105	2,53,45,550	1,81,67,682
	Navigation ...	7	1,05,65,000	92,60,933
	Railways and tramways ...	12	1,07,30,000	69,58,443
	Co-operative associations ...	20	7,02,500	3,77,140
	Shipping, landing, and warehousing ...	5	7,31,600	6,29,100
	Total ...	149	4,80,74,650	3,53,93,300
Mills and Presses	Cotton mills ...	58	5,48,52,250	3,97,61,661
	Jute mills ...	10	1,26,75,000	1,07,11,200
	Mills for cotton, jute, wool, silk, hemp, &c. ...	58	4,62,87,000	3,53,85,649
	Cotton and jute screws and presses ...	63	1,38,05,380	1,26,41,118
	Other mills and presses ...	30	64,66,000	38,40,520
	Total ...	219	13,40,85,830	10,23,40,148
Tea and other Planting Companies	Tea ...	129	4,13,39,075	3,52,91,400
	Coffee and cinchona ...	7	6,00,000	5,14,285
	Others ...	9	9,10,000	5,41,833
	Total ...	145	4,28,49,075	3,63,47,518
Mining and Quarrying	...	20	85,00,100	79,34,858
Ice manufacture	...	13	26,07,500	19,59,933
Sugar manufacture	...	1	16,00,000	16,00,000
Breweries	...	3	17,00,000	12,00,000
Others	...	14	87,11,000	82,70,609
	GRAND TOTAL ...	895	31,33,98,430	22,99,75,077

The largest part—1,023 lakhs paid-up—of the aggregate capital is invested in mills and presses chiefly for working or pressing cotton, jute, wool, and silk. The greater number of these are registered in Bombay, that Presidency representing under this head a paid-up capital of 721 lakhs, or over two-thirds of the whole, most of it invested in cotton mills and presses. The sum of 199 lakhs represents the paid-up capital invested in mills and presses registered in Bengal, their working being mainly limited to jute.

In tea, coffee, and other plantations 363 lakhs of paid-up capital are invested, of which 344 lakhs are held in Bengal, most of the tea companies being registered in Calcutta.

The paid-up capital invested in banking or loan companies amounts to 349 lakhs, of which 180 lakhs are in companies registered in Bengal and 96 lakhs in Madras.

Trading companies have a paid-up capital of 354 lakhs, of which 93 lakhs are invested in coasting and river steamer companies, and about 70 lakhs in railways and tramways. Of these 70 lakhs the bulk is invested in the Bombay tramways (30 lakhs), the Darjeeling-Himalayan Railway (17½ lakhs), the Tarkessar Railway (16½ lakhs), the Deoghur Railway (2½ lakhs).

Of the 79 lakhs invested in mining and quarrying companies, 59 lakhs are in companies registered in Bengal, 52 lakhs being invested in that province in coal mining companies.

4. Comparing the paid-up capital of the last two years, the figures below are of some interest. The figures are rupees, 000's omitted :

		PAID UP IN—	
		1887-88.	1888-89.
Banking and loan ...	...	324.63	327.37
Merchants and traders ...	...	173.24	181.67
Mills for cotton, jute, wool, silk, and hemp ...	...	794.81	858.58
Cotton and jute presses ...	...	121.50	126.41
Tea ...	...	354.36	352.91
Mining and quarrying ...	...	100.95	79.34
Navigation ...	...	89.45	92.61
Railways and tramways ...	...	68.89	69.58

The only considerable increase in capital—about 8 per cent—was assigned to mills, mainly cotton mills.

5. The following table shews the number of companies under each category during the last five years :

COMPANIES.		1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	Increase or decrease per cent in 1888-89 compared with 1884-85.
Banking, Loan, and Insurance.	Banking and loan ...	196	227	359	362	314	+ 60
	Insurance ...	31	14	13	17	17	+ 55
	Total ...	207	301	372	379	331	+ 60
Trading ...	Merchants and traders ...	85	85	88	98	105	+ 24
	Navigation ...	8	7	10	7	7	— 12
	Railways and tramways ...	7	8	10	11	12	+ 71
	Co-operative associations ...	14	13	15	18	20	+ 43
	Shipping, landing, and warehousing ...	4	8	5	6	5	+ 25
	Total ...	118	121	128	140	149	+ 26
Mills and Presses	Cotton mills ...	44	48	53	51	58	+ 32
	Jute mills ...	11	10	10	10	10	— 9
	Mills for working cotton, jute, wool, silk, hemp, &c. ...	42	45	38	50	58	+ 38
	Cotton and jute screws and presses ...	55	51	60	60	63	+ 15
	Other mills and presses ...	10	26	29	27	30	+ 200
	Total ...	162	180	190	198	219	+ 35
Tea and other Planting Companies.	Tea ...	127	130	131	127	129	+ 2
	Coffee ...	3	2	7	7	7	— 12
	Chinchona ...	5	3	3	3	3	— 12
	Others ...	3	5	5	7	9	+ 200
	Total ...	138	142	143	141	145	+ 5
Mining and Quarrying ...	...	25	26	25	23	20	— 20
Ice manufacture ...	...	14	12	12	12	13	— 7
Sugar manufacture ...	...	4	4	2	1	1	— 75
Breweries ...	...	3	3	3	3	3	Nil.
Others ...	...	23	16	13	13	14	— 39
	GRAND TOTAL ...	694	805	889	910	895	+ 29

6. The following table shews, so far as reported, the total number of joint stock companies at work in India with their nominal and paid-up capital at the end of each of the last nine years:

YEARS.	Companies at work.	Nominal capital.	Paid-up capital.	Increase of paid-up capital.
		Rs.	Rs.	Rs.
1880-81 ... ..	475	19,74,10,150	14,86,66,304	.....
1881-82 ... ..	500	21,29,73,730	15,45,80,041	59,13,677 = 4 %
1882-83 ... ..	547	22,17,01,800	17,01,59,044	1,55,79,003 = 10 „
1883-84 ... ..	649	26,67,34,384	18,75,66,107	1,73,47,063 = 10 „
1884-85 ... ..	696	27,83,76,908	20,63,58,444	1,88,52,337 = 10 „
1885-86 ... ..	805	28,54,34,367	21,00,25,077	36,67,233 = 2 „
1886-87 ... ..	888	29,13,61,646	21,38,04,422	37,78,745 = 2 „
1887-88 ... ..	910	30,23,42,842	22,32,61,925	94,37,503 = 4 „
1888-89 ... ..	895	31,33,08,450	22,99,75,077	67,13,152 = 3 „

The increase during the year was 67 lakhs, being at the rate of 3 per cent. The average annual rate of increase during the eight years has been 5 per cent. In the last four years the increase has been slow.

7. The statistics of companies limited by guarantee have apparently been defectively reported. The figures, so far as they go, shew that there were 79 such companies at the close of 1887-88, almost all in the Madras Presidency, being mostly small benefit societies of a speculative and not infrequently fraudulent character. A great number of these companies was started in 1885-86 in Madras, collapsing after a year or two. Thirty ceased to work in 1888-89. Four new companies being added, there were 53 such companies at the close of the year.

8. The fees realised and the expenditure in each province last year were:

PROVINCE.	Fees.	Expenditure.
	Rs. A. P.	Rs. A. P.
Bengal ... ..	6,354 12 0	617 0 4
Bombay ... ..	10,091 0 0	1,052 5 0
Madras ... ..	5,096 10 0	1,505 4 9
North-Western Provinces and Oudh ... ..	895 12 0	...
Punjab ... ..	4,352 12 0	...
Central Provinces ... ..	...	...
Burma ... ..	280 0 0	...
Assam ... ..	10 0 0	...
Mysore State ... ..	3,821 13 2	...
Bangalore ... ..	205 0 0	...
Hyderabad Assigned Districts ... ..	43 0 0	...
TOTAL ... ..	28,740 9 2	3,175 0 1

\* Government of Madras.  
 " Bombay.  
 " Bengal.  
 " the North-Western Provinces  
 and Oudh.  
 " the Punjab.  
 Chief Commissioner of the Central Provinces.  
 " " Burma.  
 " " Assam.  
 " " Ajmere.  
 " " Coorg.  
 Secretary for Berar to the Resident at Hyderabad.

ORDER.—Ordered, that the foregoing Resolution be published in the Supplement to the *Gazette of India*, and that copies be forwarded to all Local Governments and Administrations\* and to the Foreign Department for communication to the Resident in Mysore.

E. J. SINKINSON,  
 Secretary to the Government of India.

TABLE I.

*Joint Stock Companies at work at the end of 1888-89.*

Provinces.	Capital.	Banking or Loan Companies.	Trading Companies.	Mills and Presses.	Tee and other Planting Companies.	Mining and Quarrying Companies.	Ice Companies.	Sugar.	Breweries.	Others.	Total.
Muztas Presidency	Nominal Paid-up	No. 28 Rs. 2,44,49,600 96,71,717	No. 22 Rs. 40,55,000 9,31,326	No. 19 Rs. 60,42,000 41,79,637	No. 8 Rs. 12,20,000 9,33,113	No. 7 Rs. 14,31,100 10,49,548	No. 1 Rs. 58,203	No. 1 Rs. 80,000	No. 1 Rs. 2,72,80,720	No. 206 Rs. 1,61,90,138	2,72,80,720
Bombay Presidency	Nominal Paid-up	No. 14 Rs. 91,00,000 28,11,630	No. 45 Rs. 3,01,36,600 1,56,18,506	No. 42 Rs. 9,56,53,830 7,30,84,511	No. 3 Rs. 1,75,000 56,130	No. 1 Rs. 8,30,000 8,73,486	No. 6 Rs. 15,77,500 10,23,075	No. 6 Rs. 74,05,000 72,57,050	No. 333 Rs. 13,48,69,030 9,87,43,353	13,48,69,030	
Bengal	Nominal Paid-up	No. 38 Rs. 3,30,65,000 1,79,53,637	No. 36 Rs. 1,93,97,800 1,04,44,685	No. 30 Rs. 3,25,95,000 1,68,64,850	No. 17 Rs. 4,04,88,575 3,44,38,725	No. 3 Rs. 63,67,000 58,01,830	No. 3 Rs. 7,10,000 7,03,120	No. 3 Rs. 11,60,000 8,91,800	No. 234 Rs. 11,60,75,575 9,77,37,068	11,60,75,575	
North Western Provinces and Oudh	Nominal Paid-up	No. 11 Rs. 37,38,000 30,56,740	No. 22 Rs. 19,36,000 6,20,740	No. 22 Rs. 46,21,000 55,64,360	No. 3 Rs. 6,63,000 6,03,000	No. 1 Rs. 1,50,000 1,09,570	No. 1 Rs. 1,50,000 1,09,570	No. 2 Rs. 91,000 91,000	No. 54 Rs. 10,349,000 85,55,419	10,349,000	
Punjab	Nominal Paid-up	No. 3 Rs. 18,00,000 7,71,630	No. 9 Rs. 9,44,500 5,96,531	No. 4 Rs. 21,61,000 9,61,000	No. 2 Rs. 3,22,000 2,87,100	No. 1 Rs. 2,20,000 2,20,000	No. 1 Rs. 1,00,000 57,805	No. 1 Rs. 30,000 10,000	No. 22 Rs. 59,68,000 35,64,166	59,68,000	
Central Provinces	Nominal Paid-up	No. 1 Rs. 30,000 29,805	No. 9 Rs. 12,66,550 11,39,315	No. 3 Rs. 81,60,000 5,77,790	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 3 Rs. 11,60,000 8,77,700	11,60,000	
Burma	Nominal Paid-up	No. 1 Rs. 30,000 29,805	No. 9 Rs. 12,66,550 11,39,315	No. 3 Rs. 81,60,000 5,77,790	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 11 Rs. 13,31,550 11,37,110	13,31,550	
Assam	Nominal Paid-up	No. 1 Rs. 30,000 29,805	No. 9 Rs. 12,66,550 11,39,315	No. 3 Rs. 81,60,000 5,77,790	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 2 Rs. 55,000 55,000	55,000	
Mysore State	Nominal Paid-up	No. 1 Rs. 30,000 29,805	No. 9 Rs. 12,66,550 11,39,315	No. 3 Rs. 81,60,000 5,77,790	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 66 Rs. 55,45,675 31,86,161	55,45,675	
Bangalore	Nominal Paid-up	No. 1 Rs. 30,000 29,805	No. 9 Rs. 12,66,550 11,39,315	No. 3 Rs. 81,60,000 5,77,790	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 125 Rs. 19,55,000 11,60,623	19,55,000	
Hyderabad Assigned Districts	Nominal Paid-up	No. 1 Rs. 30,000 29,805	No. 9 Rs. 12,66,550 11,39,315	No. 3 Rs. 81,60,000 5,77,790	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 1 Rs. 20,000 20,000	No. 2 Rs. 10,000 10,000	10,000	
Total	Nominal Paid-up	No. 331 Rs. 6,51,70,495 3,40,28,713	No. 189 Rs. 4,80,74,650 3,53,91,300	No. 210 Rs. 13,40,85,830 10,23,40,148	No. 145 Rs. 4,28,09,075 3,61,27,518	No. 20 Rs. 85,00,100 79,31,848	No. 13 Rs. 16,07,500 19,59,932	No. 14 Rs. 27,00,000 19,00,000	No. 868 Rs. 31,33,08,450 32,98,75,077	31,33,08,450	

\* Not reported.

TABLE II.

*Companies divided into shares.*

PROVINCES.	WORKING AT CLOSE OF 1887-88.			REGISTERED DURING 1888-89.			CAPITAL INCREASED DURING 1888-89.			CAPITAL DECREASED DURING 1888-89.			CALLED TO WORK DURING 1888-89.			WORKING AT CLOSE OF 1888-89.		
	No.	Nominal capital.	Paid-up capital.	No.	Nominal capital.	Paid-up capital.	No.	Nominal capital.	Paid-up capital.	No.	Nominal capital.	Paid-up capital.	No.	Nominal capital.	Paid-up capital.	No.	Nominal capital.	Paid-up capital.
Madras Presidency	317	3,05,07,012	1,63,99,044	20	27,85,548	4,20,058	9	11,98,004	*	...	Rs.	...	81	67,90,831	...	166	3,73,80,720	1,67,00,358
Bombay Presidency	204	19,68,03,935	9,20,82,977	27	95,37,000	8,01,000	20	19,12,000	*	...	...	...	8	13,05,000	10,76,435	122	11,48,66,910	9,67,43,385
Bengal	227	67,51,74,573	9,85,97,005	20	27,07,000	*	3	6,50,000	*	...	...	...	13	34,18,000	...	214	17,60,73,575	9,77,87,068
North-Western Provinces and Oudh	51	1,11,70,000	82,11,000	9	86,000	*	1	1,00,000	*	...	...	...	3	1,09,000	4,000	54	9,31,49,000	85,55,419
Punjab	21	41,60,000	34,34,914	3	13,02,000	*	3	5,00,000	*	...	...	...	3	1,00,000	...	28	50,68,000	35,04,168
Central Provinces	3	11,60,000	8,72,595	...	...	...	...	...	5,105	...	...	...	...	...	...	3	11,60,000	8,77,790
Barma	12	13,95,550	12,41,055	1	90,000	*	...	...	...	...	...	...	3	2,15,000	*	19	15,31,150	11,77,310
Assam	3	55,000	*	...	...	...	...	...	...	...	...	...	...	...	...	3	55,000	*
Mysore State	27	19,57,175	15,29,188	13	2,08,000	*	5	1,30,000	*	...	...	...	3	30,000	*	66	13,49,675	12,66,161
Bangalore	13	19,74,500	13,21,870	...	...	...	3	90,500	*	...	...	...	1	1,10,000	...	12	19,55,000	21,60,633
Hyderabad Assigned District	...	...	...	1	10,000	10,000	...	...	...	...	...	...	...	...	...	1	10,000	10,000
TOTAL	910	50,45,42,844	34,32,61,985	57	1,77,08,545	13,31,658	22	45,82,404	5,105	...	...	...	212	1,15,95,437	20,80,445	895	37,33,08,450	33,09,75,072

\* Not reported.



TABLE III.

*Companies limited by guarantee, i.e., possessing no capital paid-up.*

PROVINCES.	Number working at close of 1887-88.	Number regis- tered during 1888-89.	Number ceased to work during 1888-89.	Number working at close of 1888-89.
Madras Presidency	53	1	20	34
Bombay Presidency	Nil	0	Nil	1
Bengal	1	Nil	Nil	1
North-Western Provinces and Oudh	Nil	Nil	Nil	Nil
Punjab	3	Nil	1	2
Central Provinces	Nil	Nil	Nil	Nil
Burma	Nil	Nil	Nil	Nil
Assam	Nil	Nil	Nil	Nil
Mysore State	17	Nil	Nil	17
Bangalore	1	Nil	Nil	1
Total	75	1	21	55

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on Monday,  
October 21st, 1889.**

The rainfall of the summer monsoon is as a rule concluded all over the Indian region by about the 15th of October, while the rainfall of the winter monsoon on the Coromandel Coast commences at about the same time. Hence the middle of October forms a convenient division for the purposes of rainfall registration, and, while the last summary showed the final results of the summer monsoon, the present summary shows the first effects of the winter monsoon. In normal years the weather of the present week is characterised by more or less heavy showers over Burmah, Assam and Bengal, by very slight showers in Upper India, the Gangetic plain, the Central Provinces, Central India and the north of the Peninsula, and by moderately heavy rain in the Carnatic and South India. The records of the present week show that this normal distribution has been largely departed from owing mainly to the action of the cyclonic storm, the formation of which over the Bay was noticed last week. This storm not only occasioned increased energy and rainfall in the north-east monsoon current blowing on the East Coast of the Peninsula, but induced a strong south-west current on the opposite coast, and occasioned very heavy rain there and also in Berar and the west of the Central Provinces.

The chart of the 15th showed relatively high pressures over the north-west of the Punjab and the Assam Valley, low pressures over the Peninsula with two minima,—one off the Coromandel and one off the Malabar Coast. Irregular and partial cyclonic circulations of the wind prevailed in the neighbourhood of both disturbances, but the depression of the barometer within the low pressure areas was in moderate only, and the winds were by no means strong. The weather was exceedingly fine all over Northern India, the Central Provinces, Central India and the north of the Peninsula. The chart of the 16th showed that the Madras depression had crossed the Coast during the preceding night and was advancing in a west-north-west direction towards the South Bombay Deccan. The storm had increased somewhat in intensity, and the somewhat irregular cyclonic circulation of the winds had increased in force, and a moderate gale was reported from Cocanada. The weather was hence unsettled over the Peninsula, while it remained exceedingly fine elsewhere. By the morning of the 17th the storm lay a few miles to the south-eastward of Belgaum. The depression had continued to develop, and the lowest pressures reported were about 0.1 inch lower than those of the preceding day. The general conditions of the weather were unchanged, unsettled stormy weather prevailing over the Peninsula and exceedingly fine weather all over Northern India. The chart of the 18th showed that the storm had hardly moved its position. The centre had apparently passed over Bellary, and the wind was south-south-west at that station instead of north as on the preceding day. The storm was apparently recurving and advancing northward along the east of the Ghâts towards Berar. A cyclonic circulation of fairly strong winds prevailed, and the weather remained very unsettled all over the Peninsula. Very fine weather continued in the north. By the 19th the storm was beginning to fill up. It had advanced very slowly in a north-north-east direction, and the centre lay near Sholapur. There was no other change of importance. The chart of the 20th showed that the process of filling up continued, and that the depression was now very slight. The centre apparently lay to the south-east of Nagpur, so that it had continued to move north-eastward and the unsettled weather had spread into the Central Provinces. There was no change over Northern India. On the 21st the depression was unchanged in character, but the centre had apparently moved slightly eastward. The weather was unchanged.

*Temperature.*—A remarkable depression of temperature has prevailed during the past week. In the Peninsula and the central parts of the country this depression has been very largely due to the excessive rainfall, but in Northern India it has apparently been attributable to an abnormal wave of cold which has advanced over Upper India, seemingly from the north-westward. At first this

abnormal coolness was more noticeable in the night than in the day temperatures: thus, at Quetta on the night of the 16th the minimum temperature was  $10\frac{1}{2}^{\circ}$  lower than usual and at Hyderabad, Jacobabad, Dera Ismail Khan, Rawalpindi and Roorkee was more than  $7^{\circ}$  in defect. This large deficiency in the night temperatures continued and spread over the whole of Northern India, and at the same time the maxima became affected in a slighter but similar manner.

The net result of these two causes was that the returns for the week as given in the table below showed a general deficiency in all Provinces, except Burmah and the Central Provinces, where there was an excess of about half degree:

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah	+ $0.9^{\circ}$	+ $0.5^{\circ}$
Bengal	+ $0.9^{\circ}$	- $0.2^{\circ}$
North-Western Provinces	+ $0.7^{\circ}$	- $2.6^{\circ}$
Punjab	- $1.5^{\circ}$	- $4.7^{\circ}$
Bombay	+ $0.9^{\circ}$	- $0.5^{\circ}$
Central Provinces	+ $0.9^{\circ}$	+ $0.3^{\circ}$
Guzerat and Central India	+ $0.8^{\circ}$	- $1.3^{\circ}$
Sind and Rajputana	- $1.0^{\circ}$	- $4.2^{\circ}$
Madras	+ $0.2^{\circ}$	- $0.7^{\circ}$

This table shows a steady fall of temperature compared with the average throughout the country, the decrease being greatest  $3.2^{\circ}$  over Upper India. At many stations the minimum readings recorded were lower than any recorded in any previous October. At Quetta the thermometer fell below the freezing point on nearly every morning during the week.

*Rain.*—There has again been no rain over Upper India. In the Central Provinces showers recommenced during the week, and in all other parts of India there has been general, and over the Peninsula heavy, rainfall. A large part of this rainfall has been due to the barometric depression which passed into India from the Bay, but in Burmah and Bengal it has been attributable to fairly general showers.

The following is a brief description of the daily distribution:—On the 15th there was general rain over the Peninsula to the south of a line joining Vizagapatam to Ratnagiri; there were also local showers in the north-west angle of the Bay and in parts of Burmah. Elsewhere the weather was fine and dry. The heaviest falls were at West Coast stations. On the 16th the distribution was the same, except that there was some slight northward extension of the rainfall area. The chart of the 17th showed no change, but on the 18th the rainfall area was extending further northward into Berar, while the falls in South-West Bengal, Orissa and the Circars had become much heavier. On the 19th rain had spread into the Central Provinces, but had fallen off in the south of the Peninsula. On the 20th the rain had fallen lighter generally and had altogether ceased over a large part of the south and west of the Peninsula. In the Circars, Orissa, Lower Bengal and the Central Provinces it still continued, and in Burmah general showers were reported. On the 21st there was no change.

The concluding table shows that no rain whatever fell during the week in the Assam Valley, North Bengal, Behar, the greater part of the North-Western Provinces, the Punjab, Rajputana, Sind and Kattiawar. In twenty-seven divisions the week's fall was short of the normal and in nineteen was in excess. In Sind and Kattiawar rain neither fell nor was expected during the week. The greatest excess was 8 inches in Coorg, followed by  $5\frac{1}{2}$  inches in Malabar, 4 inches in the Konkan and East Coast Central and  $3\frac{1}{2}$  inches in East Coast North and the Bombay Deccan. The greatest excess relatively to the average was however in the Central Provinces (west), where the normal rainfall was only  $0.25$  inch, and the amount received  $2.41$  inches, or nearly ten times as much.

The returns of maximum falls exhibit several exceptionally large amounts considering the time of year: thus, Vayitri in Calicut received 23 inches; Karkal in south Kanara,  $16\frac{1}{2}$  inches; Gudapur in the Nilgiris,  $10\frac{1}{2}$  inches; Verojendrapet in Coorg, 11 inches; and Kumpta in North Kanara, 15 inches; on the eastern side of the Peninsula Yellamanchili in Vizagapatam received 12 inches; Narsapur in Godavery,  $13\frac{1}{2}$  inches; Repalli in Kistna,  $12\frac{1}{2}$  inches; Ongoli in Nellore,  $10\frac{1}{2}$  inches; and Ponnery in Chingleput,  $13\frac{1}{2}$  inches.

These falls, but more especially those on the western side of the Peninsula, are exceptionally heavy for the season.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING OCTOBER 21ST, 1889.			RAINFALL DATA FROM OCTOBER 1ST TO OCTOBER 21ST, 1889.		
		Average Actual Rainfall of Division.	Average Normal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Normal Rainfall, October 1st to October 21st.	Ratio of De- fect (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	4.85	2.48	+ 2.37	4.85	2.48	+ 96
	Lower Burmah	2.45	1.68	+ 0.77	2.45	1.68	+ 46
	Central Burmah	1.77	1.20	+ 0.57	1.77	1.20	+ 48
	Upper Burmah	1.15	?	?	1.15	?	?
	Arakan	0.75	1.16	- 0.41	0.75	1.16	- 9
BENGAL AND ASSAM	Eastern Bengal	0.16	1.56	- 1.40	0.16	1.56	- 90
	Assam (Surma)	0.12	1.41	- 1.29	0.12	1.41	- 91
	Do. (Brahmaputra)	0	1.17	- 1.17	0	1.17	- 100
	Deltaic Bengal	0.32	1.31	- 0.99	0.32	1.31	- 76
	Central Bengal	0.15	1.28	- 1.13	0.15	1.28	- 88
	North Bengal	0	1.23	- 1.23	0	1.23	- 100
	Orissa	2.06	1.43	+ 1.53	2.06	1.43	+ 109
	Chutia Nagpur	0.27	0.59	- 0.32	0.27	0.59	- 54
	Behar (South)	0	0.54	- 0.54	0	0.54	- 100
	Do. (North)	0	0.56	- 0.56	0	0.56	- 100
NORTH - WESTERN PROVINCES AND ODH.	North - Western Provinces (East).	0.24	0.13	+ 0.11	0.24	0.13	+ 85
	Oudh (South)	0.02	0.13	- 0.11	0.02	0.13	- 85
	Do. (North)	0	0.04	- 0.04	0	0.04	- 100
	North - Western Provinces (Central).	0	0.04	- 0.04	0	0.04	- 100
	North - Western Provinces (West).	0	0.01	- 0.01	0	0.01	- 100
	North - Western Provinces (Submontane).	0	0.09	- 0.09	0	0.09	- 100
PUNJAB	Punjab (South)	0	0.08	- 0.08	0	0.08	- 100
	Do. (Central)	0	0.16	- 0.16	0	0.16	- 100
	Do. (Submontane)	0	0.01	- 0.01	0	0.01	- 100
	Do. (Hill Districts)	0	0.12	- 0.12	0	0.12	- 100
	Do. (North-West)	0	0.15	- 0.15	0	0.15	- 100
	Do. (West)	0	0.03	- 0.03	0	0.03	- 100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	7.61	2.11	+ 5.50	7.61	2.11	+ 261
	Madras (South Central)	2.91	2.64	+ 0.27	2.91	2.64	+ 10
	Coorg	10.00	1.81	+ 8.19	10.00	1.81	+ 452
	Mysore	1.77	1.03	+ 0.74	1.77	1.03	+ 72
	Konkan	4.83	0.61	+ 4.22	4.83	0.61	+ 692
	Bombay Deccan	4.92	1.17	+ 3.75	4.92	1.17	+ 321
	Hyderabad (North)	...	...	...	...	...	...
CENTRAL PROVINCES AND BEHAR.	Khandeish	1.26	1.33	- 0.07	1.26	1.33	- 5
	Behar	2.31	1.00	+ 1.31	2.31	1.00	+ 131
	Central Provinces (West)	2.41	0.25	+ 2.16	2.41	0.25	+ 864
	Ditto (Central)	0.61	0.15	+ 0.46	0.61	0.15	+ 307
BOMBAY (NORTH)	Ditto (East)	0.63	0.35	+ 0.28	0.63	0.35	+ 80
	Guzerat	0.02	0.20	- 0.18	0.02	0.20	- 90
	Kathiawar	0	0	0	0	0	0
RAJPUTANA AND CEN- TRAL INDIA.	Sind	0	0	0	0	0	0
	Central India (East)	0.08	0.19	- 0.11	0.08	0.19	- 58
	Rajputana (East), India (West).	0	0.09	- 0.09	0	0.09	- 100
	Rajputana (West)	0	0.03	- 0.03	0	0.03	- 100
MADRAS	East Coast (North)	5.79	2.25	+ 3.54	5.79	2.25	+ 157
	Do. (North) (a)	4.25	?	?	4.25	?	?
	Hyderabad (South)	1.45	0.86	+ 0.59	1.45	0.86	+ 69
	Madras (Central)	3.78	1.11	+ 2.67	3.78	1.11	+ 241
	East Coast (Central)	6.61	2.55	+ 4.06	6.61	2.55	+ 159
	Ditto (South)	2.43	1.89	+ 0.54	2.43	1.89	+ 29
	Madras (South)	0.59	1.88	- 1.29	0.59	1.88	- 69

W. L. DALLAS,

Assistant Meteorological Reporter to the  
Government of India.

J. MUIR-MACKENZIE,

Off. Secretary to the Government of India.

SIMLA, 25th October, 1889.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 19th October.*—Rainfall good throughout the Presidency. Crops generally good, but suffering from excessive rain in parts of Ganjam, Godavari, Kistna, Bellary, Anantapur and Kurnool, and withering from want of rain in parts of Chingleput and South Arcot. *Ragi* and castor damaged by insects in parts of Trichinopoly. Prices generally falling or stationary. Labourers employed last day of week,—Rushikulya works, 3,378; Gopalpore Canal, 449; Ghat Roads, 1,434; other minor works, 4,935. Number on village relief on 12th October, 14,540, including 8,646 children; fed in kitchens, 4,735, including 3,544 children. Imports into Ganjam during week by sea and land 441 tons. General prospects good.

**Bombay.**—*For week ending 23rd October.*—Heavy rain during the week throughout Deccan and Carnatic, in parts injuring crops and retarding agricultural operations; prospects otherwise generally good. Harvesting and sowing operations progressing. Fodder sufficient and agricultural stock generally healthy.

**Bengal.**—*For week ending 22nd October.*—General and rather heavy rain has fallen in Orissa, and partial showers are reported from other parts of the Province. More rain is still wanted in several districts for winter rice, especially on high lands. Cultivation of *rabi* or cold weather crops is in progress, but is in want of rain in some districts. Sugarcane is generally a promising crop. The price of rice is cheaper than at this time last year in Chota Nagpur and Orissa, but is still much dearer in the districts of Bengal and Behar. In the affected tracts in Durbhanga, Munzaffarpur and Chumparun prices are said to be steadily falling, and food-stocks are sufficient. There is also an adequate supply of food in the affected area in Midnapur, where all relief operations have been closed. In Durbhanga labourers are finding work in the fields.

**North-Western Provinces and Oudh.**—*For week ending 23rd October.*—Weather generally fine, except in eastern districts, where it has been cloudy. Harvesting of *kharif* nearly completed; the outturn promises well. *Rabi* sowings in progress. Supplies ample, but prices are still fluctuating.

**Punjab.**—*For week ending 23rd October.*—No rain. Prices stationary in all districts, except Delhi and Rawalpindi, where they are rising. Harvesting of *kharif* crops commenced. Ploughings for, and sowings of, *rabi* in progress. Rain much wanted in all districts for *rabi* sowings and also for *kharif* crops in Ferozepur and Lahore. Crops are reported to be in good condition, except in Hissar and Peshawar, where they are said to be below the average. Crop on *barani* land has suffered much in Muktsar and Fazilka for want of rain. Fodder is sufficient throughout the Province. Poppy sowings commenced in Shahpur.

**Central Provinces.**—*For week ending 23rd October.*—Rain has fallen in Seoni, Wardha, Nagpur and Sambalpur. In Seoni, Nagpur and Balaghat the rain has been injurious to standing crops and to the *rabi* sowings. In Wardha, where the fall of rain has been particularly heavy, the cotton and linseed crops have been damaged. *Rabi* sowings are in progress in the Chhattisgarh district. Rice is being reaped, and if not damaged by rain, good prospects are anticipated. Prices steady.

**Burma.**—*For week ending 19th October.*—Heavy rain fell in Thongwa, Henzada and Shwegyin. The fall was light in Prome and Thayetmyo; elsewhere it was normal. In the northern portion of Tharrawaddy more rain is needed, and rain is wanted in Thayetmyo. The crop prospect in Lower Burma continues good. In Upper Burma rain is wanted in Shwebo and parts of Minbu.

In Pyinmana there was a heavy fall, and elsewhere it was light. The crop prospect in Upper Burma is generally good. There was a fall in the price of paddy in Prome, Thongwa and Amherst; in other districts prices remained unchanged. In Upper Burma there was a rise in the price at Shwebo, and in the other districts there were no fluctuations. The food-supply is sufficient throughout the Province.

**Assam.**—*For week ending 23rd October.*—Weather seasonable. Mustard and pulses being sown. Tea and other standing crops doing well.

**Mysore and Coorg.**—*For week ending 23rd October.*—Rainfall good throughout the State of Mysore. Standing crops in good condition. Harvesting operations continue. Prospects of season favourable. Prices slightly risen in Shimoga, Kadur and Chitaldroog districts.

Rainfall 5·27 inches in Coorg. Standing crops good.

**Berar and Hyderabad.**—*For week ending 23rd October.*—Average rainfall in Berar 2·8 inches. Picking of cotton commenced. *Jowari* in good condition. Locusts appeared in Amraoti taluka, but no damage done. Fodder sufficient, except in Chikli. Prices declining. *Rabi* sowing in progress.

Rainfall during week in Hyderabad 2·52 inches; total since 1st January 36·67 inches. Harvesting of *kharif* crops finished in some places and continues in others. Prices stationary.

**Central India.**—*For week ending 23rd October.*—Slight rain fell in Baghelkhand. Prices rising in Baghelkhand and Neemuch; stationary at Goona.

**Rajputana.**—*For week ending 23rd October.*—No rain. Agricultural operations satisfactory. *Rabi* crops being sown. Agricultural stock good. Pasturage or fodder sufficient, except in Marwar. Prices steady generally.

**Nepal.**—*For week ending 17th October.*—Weather seasonable. Harvesting of paddy is in progress; outturn very favourable.

J MUIR-MACKENZIE,

*Offg. Secretary to the Government of India.*



GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXVI. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 29TH SEPTEMBER 1889.				WEEK ENDING 28TH SEPTEMBER 1889.				TOTAL RECEIPTS FROM 1ST APRIL TO 29TH SEPTEMBER 1889.				TOTAL RECEIPTS FROM 1ST APRIL TO 28TH SEPTEMBER 1889.				Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.								
			Total.	Per mile open.		Total.	Per mile open.												
			Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.			
	State Lines worked by Companies.																		
5th October 1889	East Indian	1,514	2,67,863	507	1,526	(a) 7,51,395	492	2,07,36,297	527	(a) 2,11,05,171	532	3,58,889	...						
5th ditto	Patna-Gya.	57	21,891	384	57	15,560	273	2,29,142	154	2,32,781	157	3,639	...						
5th ditto	Dildarnagar-Ghazipur	12	969	56	...	(b)	...	36,287	116	(b)	...	...	36,287						
5th ditto	Sindia	75	5,492	73	...	(c)	...	1,79,188	92	(c)	...	...	1,79,188						
5th October 1889	Rajputana-Malwa	1,664	2,77,643	164	1,672	2,61,000	156	87,97,002	201	94,35,306	219	6,38,204	...						
5th ditto	Bengal-Nagpur (d)	186	18,880	102	305	(e) 24,633	81	7,47,354	155	(e) 8,75,918	113	1,28,564	...						
5th ditto	Southern Mahratta (f)	854	66,101	77	850	56,441	66	19,15,094	86	20,04,200	93	1,49,106	...						
5th ditto	Du. Mysore Section	140	9,667	69	296	23,141	78	2,69,322	74	4,09,863	66	1,40,541	...						
5th ditto	Indian Midland	130	10,617	73	746	(g) 44,948	60	3,46,498	98	(f) 13,59,490	79	10,12,722	...						
28th September 1889	Villupuram - Dharma-varam (Nellore Branch)	83	4,740	57	83	4,518	54	1,26,155	58	1,24,404	58	...	...						
5th October 1889	Bareilly-Pilibhit	36	1,102	31	36	1,522	42	37,834	42	47,030	53	9,741	1,731						
	TOTAL	4,757	21,79,671	248	5,577	11,83,166	212	3,34,20,213	270	3,56,44,463	254	22,24,250	...						
	State Lines worked by Government.																		
5th October 1889	North Western (A)	2,469	5,55,876	225	2,386	3,44,777	228	1,21,99,457	300	1,34,67,796	215	10,68,339	...						
5th ditto	Oudh and Rohilkhand	692	90,290	136	692	1,14,911	166	33,60,072	186	37,74,268	210	4,14,696	...						
28th September 1889	Bengal Central	125	20,318	163	125	19,670	157	3,35,561	103	3,71,789	114	3,228	...						
5th October 1889	Wardha-Cool	45	17,521	399	45	19,417	431	3,01,292	311	3,72,097	320	8,805	...						
28th September 1889	Eastern Bengal	673	3,13,837	466	747	3,11,800	417	47,54,778	272	50,09,224	271	2,54,440	...						
5th October 1889	Nalhati	27	1,077	71	27	1,700	63	49,534	73	48,542	71	...	992						
5th ditto	Tinhat	259	25,681	99	273	24,801	91	8,07,754	124	9,26,038	136	1,23,286	...						
5th ditto	Lucknow-Sitapur-Silwan	105	4,057	39	105	4,026	38	1,25,444	46	1,61,055	59	35,612	...						
5th ditto	Jorhat	25	1,131	43	25	1,036	41	31,133	49	31,912	49	819	...						
14th September 1889	Cherra-Companyganj	392	54,078	138	553	81,780	148	(j) 2,315	14	(k) 3,424	20	1,109	...						
28th ditto	Burma (i)	...	...	...	...	...	...	14,14,094	148	21,73,752	138	7,59,058	...						
	TOTAL	4,812	10,84,740	225	4,978	11,23,624	226	2,31,39,032	188	2,61,40,437	205	27,01,405	...						
	Lines worked by Guaranteed Companies.																		
5th October 1889	Madras	840	1,69,267	202	840	1,92,754	229	42,21,883	193	46,21,051	373	4,01,168	...						
28th September 1889	South Indian	634	1,04,234	159	634	1,01,401	155	28,04,953	105	29,37,163	174	1,32,210	...						
5th October 1889	Great Indian Peninsula	1,497	(m) 5,30,329	354	1,440	(n) 4,12,811	287	2,06,45,270	530	1,57,01,055	423	48,84,215	...						
5th ditto	Bombay, Baroda and Central India (o)	461	1,83,350	395	461	1,68,000	364	67,15,745	510	62,53,819	525	1,33,074	...						
	TOTAL	3,452	9,87,140	280	3,395	8,74,020	258	3,17,87,431	376	2,98,75,088	337	12,12,703	...						
GRAND TOTAL (GUARANTEED AND STATE)		13,021	32,51,537	230	13,950	31,28,419	228	9,06,47,096	268	9,13,59,988	257	7,12,892	...						
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	4,75,73,273	141	4,75,71,892	135	2,98,610	...						
NET RECEIPTS		...	...	...	...	...	...	4,30,73,823	127	4,34,88,096	122	4,14,273	...						
	Assisted Companies.																		
5th October 1889	Tarakeswar	22	4,500	205	22	4,443	202	1,37,536	238	1,43,330	248	5,794	...						
14th September 1889	Dibru-Sadiya	...	...	...	...	(i)	...	(j) 2,00,942	111	(k) 2,28,032	122	21,090	...						
5th October 1889	Bengal and North-Western	376	38,176	102	376	25,300	67	11,06,812	122	12,47,170	128	45,348	...						
5th ditto	Rohilkhand-Kumaun	67	5,913	88	67	6,037	99	1,75,007	105	1,90,782	114	15,165	...						
	TOTAL	405	48,589	304	405	36,400	78	17,16,397	122	18,04,314	128	57,917	...						
	Native States.																		
5th October 1889	His Highness the Nizam's Guaranteed	310	26,540	86	354	42,733	121	7,97,683	107	11,13,011	122	3,15,323	...						
5th ditto	His Highness the Gaekwar's	59	1,623	28	59	1,680	28	64,922	42	66,184	43	1,261	...						
5th ditto	His Highness the Gaekwar's Vicregam-	21	793	38	27	700	26	23,356	43	27,097	39	3,731	...						
5th ditto	Mehsana-Vadnagar	209	16,981	81	261	21,616	83	4,87,263	96	6,59,713	98	1,70,444	...						
5th ditto	Bhuvanagar-Gondal	68	2,182	32	68	2,317	35	99,343	51	1,00,418	57	9,905	...						
5th ditto	Morvi	124	6,395	52	124	5,200	42	1,77,003	55	1,97,270	54	9,784	...						
	TOTAL	791	54,326	69	893	74,296	83	16,42,841	84	21,33,722	92	4,90,881	...						

- (a) Includes the Dildarnagar Ghazipur State Railway.  
(b) Included with East Indian Railway.  
(c) Included with Indian Midland Railway.  
(d) Includes the Katni-Umari Branch.  
(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.  
(f) Includes the Jellary-Karna State Railway.  
(g) Includes the Sindia and Bhopal-Ikara State Railways.  
(h) Includes the Amritsar-Patnaikot and Rajpura-Bhatinda State Railways.

- (i) Return not received.  
(j) Total receipts from 1st April to 15th September 1889.  
(k) Total receipts from 1st April to 14th September 1889.  
(l) Includes the Tonkoo-Waddal Extension.  
(m) Includes the Dhond-Manmad, Khimgaon, Amratoli, and Bhopal-Ikara State Railways.  
(n) Includes the Dhond-Manmad, Khimgaon, and Amratoli State Railways.  
(o) Includes the Patri Branch.

M. C. BRACKENBURY, Major, R.E.,  
Under-Secretary.

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SUPPLEMENT TO  
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**OFFICIAL PAPERS.**

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may exclusively be made known. The Decrees of the Legislative Council of His Excellency the Governor General will in future be published as PART VI of the GAZETTE.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.

No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be turned to.

GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

**WAGES OF SKILLED AND UNSKILLED LABOUR FOR THE HALF-  
YEAR ENDING 30th JUNE 1889.**

DISTRICTS.	AVERAGE WAGES PER MONTH.		
	Able-bodied agricul- tural Labourer.	Swan or House-keeper.	Common Mason, Carpenter or Blacksmith.
<b>Burma—</b>	<i>R s. p.</i>	<i>R s. p.</i>	<i>R s. p.</i>
<b>Tenasserim—</b>			
Mergui . . . . .	20 0 0	15 0 0	30 0 0
Tavoy . . . . .	10 0 0	15 0 0	30 0 0
Moulmein and Amherst . . . . .	25 0 0	12 0 0	25 0 0
<b>Pegu (deltaic)—</b>			
Pegu . . . . .	20 0 0	12 0 0	30 0 0
Rangoon . . . . .	15 0 0	12 0 0	30 0 0
Thongwa . . . . .	10 0 0	12 0 0	30 0 0
Bassein . . . . .	15 0 0	14 0 0	50 0 0
<b>Pegu (inland)—</b>			
Shwaygyin . . . . .	15-0 to 20-0	12-0 to 15-0	30-0 to 45-0
Tharawadi . . . . .	20 0 0	12-0 to 15-0	30-0 to 45-0
Henzada . . . . .	15 0 0	12 0 0	22 0 0
Prome . . . . .	17 8 0	13 8 0	25 0 0
Toungoo . . . . .	12 0 0	14 0 0	40 0 0
Thayetmya . . . . .	15 0 0	12 0 0	30 0 0
<b>Upper Burma—</b>			
Mandalay . . . . .	12 0 0	12 0 0	15 0 0
<b>Arakan—</b>			
Sandoway . . . . .	15 0 0	10 0 0	30 0 0
Kyauk-pyu . . . . .	10 0 0	14 0 0	30 0 0
Akyab . . . . .	15-0 to 20-0	10-0 to 12-0	15-0 to 20-0

**WAGES OF SKILLED AND UNSKILLED LABOUR FOR THE HALF-YEAR ENDING 30th  
JUNE 1889—continued.**

Districts.	AVERAGE WAGES PER MONTH.		
	Able-bodied Agricultural Labourer.	Swee or Horse-keeper.	Common Mason, Carpenter or Blacksmith.
	R a. p.	R a. p.	R a. p.
<b>Assam—</b>			
<i>Surma—</i>			
Sylhet . . . . .	5 0 0	7 0 0	14 0 0
Cachar . . . . .	4 0 0	7 0 0	14-0 to 15-0
Khasi and Jaintia Hills . . . . .	8-0 to 15-0	8-0 to 12-0	15-0 to 35-0
Garo Hills . . . . .	5-10 to 7-8	7-8 to 12-0	20-0 to 40-0
<i>Brahmaputra—</i>			
Goalpara . . . . .	8-0 to 9-0	7-0 to 8-0	15-0 to 35-0
Kamrup . . . . .	6-0 to 8-0	8-0 to 10-0	12-0 to 20-0
Darrang . . . . .	7-0 to 9-0	8-0 to 10-0	16 0 0
Nowgong . . . . .	7-0 to 9-0	9-0 to 10-0	12-0 to 30-0
Sibsagar . . . . .	8-0 to 10-0	10 0 0	10-0 to 40-0
Lakhimpur . . . . .	8-0 to 10-0	8-0 to 10-0	15-0 to 40-0
<b>Bengal—</b>			
<i>Eastern hill tracts—</i>			
Chitragong Hill Tracts . . . . .	12 0 0	*	*
Hill Tipperah . . . . .	8 0 0	6 0 0	15 0 0
Naga Hills . . . . .	10-0 to 15-0	10-0 to 15-0	30-0 to 45-0
<i>Eastern—</i>			
Backergunge . . . . .	9 8 0	6 0 0	12-0 to 15-0
Noakholly . . . . .	6-0 to 10-0	5-0 to 6-0	8-0 to 14-0
Chittagong . . . . .	8 0 0	8 0 0	9-4 to 12-0
Tipperah . . . . .	7-0 to 10-0	7-0 to 8-0	8-0 to 15-0
Dacca . . . . .	6-0 to 10-0	7-0 to 12-0	8-0 to 20-0
Mymensingh . . . . .	7-8 to 9-0	6-0 to 7-0	12-0 to 30-0
<i>Deltaic—</i>			
Koolna . . . . .	7-8 to 9-6	7-0 to 8-0	12-0 to 30-0
24 Pargunnahs . . . . .	10-0 to 11-0	6-0 to 7-0	15-0 to 25-0
Midnapore . . . . .	7 8 0	6 0 0	7-8 to 10-0
Howrah . . . . .	7-8 to 15-0	7 0 0	12-0 to 25-0
Calcutta . . . . .	5-0 to 8-0	6 0 0	15 0 0
Hooghly . . . . .	9 13 6	6-0 to 7-0	10-0 to 30-0
Nuddea (Kishnaghur) . . . . .	6 0 0	6 0 0	7-8 to 15-0
Jessore . . . . .	5-0 to 7-8	4-0 to 6-0	10-0 to 15-0
Purcedpore . . . . .	7 8 0	7 0 0	15 0 0
<i>Central—</i>			
Bankoora . . . . .	7-0 to 12-0	6-0 to 9-0	9-0 to 16-0
Burdwan . . . . .	8 0 0	6 0 0	10-0 to 15-0
Beerbhoom . . . . .	5 0 0	6 0 0	3 8 0
Moorshedabad . . . . .	7 8 0	5 0 0	7-8 to 10-0
Sonthal Pargunnahs . . . . .	3 12 0	5 0 0	7-8 to 9-6
Pubna . . . . .	5-0 to 6-8	6-0 to 8-0	7-0 to 20-0
Bogra . . . . .	6-0 to 7-8	5-0 to 7-0	10-0 to 20-0
Rajshahye . . . . .	4-0 to 6-0	4-0 to 6-0	8-0 to 16-0
Maldah . . . . .	7 8 0	5-0 to 6-0	10-0 to 15-0
<i>Northern—</i>			
Rungpore . . . . .	5 0 0	6 0 0	8-0 to 20-0
Dinagopore . . . . .	7 8 0	6-0 to 8-0	10-0 to 15-0
Jalpaiguri . . . . .	7 8 0	9 0 0	15-0 to 20-0
Darjeeling . . . . .	7-0 to 8-0	7-0 to 9-0	12-0 to 22-0
<i>Orissa—</i>			
Poorce . . . . .	6 0 0	5 0 0	8-0 to 10-0
Cuttack . . . . .	5 0 0	4 8 0	6-0 to 7-8
Balasore . . . . .	4-0 to 5-0	4-0 to 6-0	7-0 to 10-0
<i>Chota-Nagpur—</i>			
Singbhoom . . . . .	3 0 0	4 0 0	12 0 0
Manbhoom . . . . .	4 11 0	5 0 0	13-2 to 15-0
Lohardugga . . . . .	3-4-6 to 3-12	3-8 to 6-0	4-11 to 14-1
Hazaribagh . . . . .	3 12 0	5 0 0	8 0 0
<i>Bihar, south—</i>			
Monghyr . . . . .	4-0 to 5-0	3-0 to 5-0	5-0 to 12-0
Gya . . . . .	2-8 to 3-0	3-0 to 5-0	6-0 to 8-0
Patna . . . . .	4-0 to 5-0	4-8 to 5-0	7-0 to 8-0
Shahabad . . . . .	5 0 0	4-0 to 6-0	6-0 to 7-8

\* Not procurable.

WAGES OF SKILLED AND UNSKILLED LABOUR FOR THE HALF-YEAR ENDING 30th  
JUNE 1889—continued.

DISTRICTS.	AVERAGE WAGES PER MONTH.		
	Able-bodied Agricul- tural Labourers.	Span or Horse-keeper.	Common Mason, Carpenter or Blacksmith.
<b>Bengal—contd.</b>	R a. p.	R a. p.	R a. p.
<i>Behar, north—</i>			
Purneah . . . . .	4-11 to 5-10	4-0 to 5-0	7-0 to 16-0
Bhāgalpur . . . . .	3-12 to 5-10	3-8 to 5-0	7-8 to 11-4
Durghunga . . . . .	3-12 to 5-0	3-0 to 5-0	3-12 to 9-8
Mozufferpore . . . . .	3-0 to 5-0	4-0 to 5-0	5-0 to 6-0
Sarun . . . . .	3-12 to 7-8	4-0 to 7-0	6-9 to 10-0
Champaran . . . . .	4-13 to 3-12	4-0 to 6-0	5-10 to 9-6
<b>N.-W. Provinces—</b>			
<i>Eastern—</i>			
Mirzapur . . . . .	4 0 0	5 0 0	8 0 0
Benares . . . . .	4 0 0	4 8 0	9 6 0
Ghazipur . . . . .	3 12 0	5 0 0	7 8 0
Jaunpur . . . . .	3 8 0	5 0 0	7 8 0
Allahabad . . . . .	4 8 0	5 0 0	12 8 0
<i>Central—</i>			
Bānda . . . . .	2-4 to 4-0	5 0 0	7-8 to 9-6
Fatehpur . . . . .	2-8 to 3-12	4-0 to 5-0	5-10 to 7-8
Hamirpur . . . . .	3 0 0	4 0 0	8 0 0
Jalaun . . . . .	3-0 to 4-0	4-0 to 6-0	8 0 0
Cawnpore . . . . .	4 0 0	4-0 to 5-0	10 0 0
Rāwāh . . . . .	4 8 0	5 0 0	9 8 0
Farukhabad . . . . .	5 0 0	5 0 0	10 0 0
Mainpuri . . . . .	4-0 to 5-0	4-0 to 6-0	8-0 to 10-0
Etah . . . . .	3-12 to 4-0	4-0 to 5-0	9-0 to 12-0
<i>Western—</i>			
Lalitpur . . . . .	4-0 to 5-0	5 0 0	10 0 0
Jhānsi . . . . .	3-8 to 4-0	5-0 to 6-0	10-0 to 12-0
Agra . . . . .	4-0 to 5-0	4-0 to 5-0	10-0 to 11-0
Muttra . . . . .	4 11 0	5 0 0	9 4 0
Aligarh . . . . .	4-0 to 5-0	4 0 0	9-0 to 10-0
Bulandshahr . . . . .	3-0 to 4-0	4-0 to 5-0	8-0 to 10-0
Meerut . . . . .	5-0 to 6-0	5 0 to 6-0	12-0 to 15-0
<i>Sub-montane—</i>			
Ballia . . . . .	4 0 0	4 0 0	7 8 0
Azamgarh . . . . .	3 12 0	5 10 0	7 8 0
Gorakhpur . . . . .	3 12 0	4-0 to 5-0	7-8 to 9-12
Basti . . . . .	3 12 0	4-0 to 5-0	12 0 0
Shāhjahanpur . . . . .	2-0 to 3-0	3-8 to 6-0	7-0 to 10-0
Budaun . . . . .	3 0 0	4 0 0	8 0 0
Pilibhit . . . . .	4 0 0	4 0 0	8 0 0
Bareilly . . . . .	3 12 0	4 0 0	7 8 0
Moradabad . . . . .	3 8 0	4-0 to 5-0	7 8 0
Tarāi . . . . .	5 0 0	6 0 0	10 0 0
Bijnor . . . . .	4 0 0	5 0 0	7 8 0
Muzaffarnagar . . . . .	4-0 to 5-0	4-0 to 5-0	10-0 to 12-0
Sahāranpur . . . . .	5 0 0	5 0 0	10 0 0
Dehra Dun . . . . .	5 0 0	6 0 0	10 0 0
Kumaun . . . . .	4-0 to 8-0	5 0 0	10-0 to 12-0
Garhwal . . . . .	5 10 0	5 0 0	10-0 to 13-0
<b>Oriss—</b>			
<i>Southern—</i>			
Partabgarh . . . . .	3 0 0	3-8 to 5-0	6 0 0
Sultānpur . . . . .	3 12 0	5 0 0	7 8 0
Ras-Bareilly . . . . .	3-8 to 4-0	4-0 to 4-8	7-0 to 8-0
Unao . . . . .	4 0 0	4-0 to 5-0	7 8 0
Lucknow . . . . .	4 0 0	4 0 0	11-4 to 13-2
Hardoi . . . . .	3 12 0	4 0 0	9 6 0
<i>Northern—</i>			
Fyzabad . . . . .	3-8 to 4-0	3 12 0	7-8 to 9-6
Barabanki . . . . .	3 8 0	4 0 0	8 0 0
Gonda . . . . .	3 0 0	3 8 0	8 0 0
Bahraich . . . . .	3 0 0	4-0 to 5-0	8-0 to 10-0
Sitapur . . . . .	4 0 0	4 0 0	8 0 0
Kheri . . . . .	4 0 0	4-8 to 5-0	7 0 0

**WAGES OF SKILLED AND UNSKILLED LABOUR FOR THE HALF-YEAR ENDING**  
**30th JUNE 1889—continued.**

Districts.	AVERAGE WAGES PER MONTH.		
	Able-bodied Agricultural Labourer.	Szyce or Horse-keeper.	Common Mason, Carpenter or Blacksmith.
<b>Rajputana—</b>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>
<i>Eastern—</i>			
Partabgarh . . . . .	7 8 0	5 10 0	15-0 to 16-14
Banswara . . . . .	5 0 0	5 0 0	11-4 to 18-12
Meywar (Oodeypore) . . . . .	4-0 to 6-0	5-0 to 6-0	12-0 to 30-0
Sirohi . . . . .	5 8 0	5 0 0	15 0 0
Erinpura . . . . .	6 0 0	6 0 0	12 0 0
Ajmere . . . . .	3-0 to 4-0	5-0 to 8-0	10-0 to 20-0
Abu . . . . .	7 8 0	7 0 0	18 12 0
Kishengarh . . . . .	3-0 to 5-0	5-0 to 7-0	4-11 to 15-12
Boondce . . . . .	5 10 0	5 10 0	7-8 to 15-0
Kotah . . . . .	4 0 0	4 0 0	7-8 to 8-0
Jhallawar . . . . .	4-0 to 5-0	4-0 to 7-0	5-0 to 30-0
Tonk . . . . .	5 10 0	5 10 0	7-8 to 15-0
Jeypore . . . . .	2-0 to 3-0	3-8 to 6-0	7-8 to 12-4
Kerauli . . . . .	2 0 0	...	4-0 to 5-8
Dholpur . . . . .	4 0 0	...	5-8 to 7-0
Bharatpur . . . . .	4 0 0	...	5-8 to 7-0
Atwar . . . . .	4-0 to 4-8	3-8 to 6-0	8-0 to 15-0
Deoli Cantonment . . . . .	3-12 to 5-10	...	7-8 to 9-6
Nasirabad Cantonment . . . . .	6-0 to 7-0	6-0 to 9-0	10-0 to 15-0
Hilly Tracts of Meywar . . . . .	5 4 0	4 9 0	9-6 to 15-0
Balmer . . . . .	5 7 6	...	11 7 4
Anadra . . . . .	7 8 0	6 0 0	...
Shahpura . . . . .	3 12 0	4 11 0	7-8 to 9-6
<i>Western—</i>			
Jodhpur . . . . .	5 10 0	4 11 0	10 5 0
Jaisalmer . . . . .	...	15 0 0	...
Bikaner . . . . .	4 11 0	4 3 6	9-6 to 11-4
<b>Central India—</b>			
Indore . . . . .	6 0 0	7 0 0	12-0 to 15-0
Nimach Cantonment . . . . .	5 10 0	7 0 0	12-0 to 13-0
Baghelkhand (Sutna) . . . . .	4 8 0	5 0 0	7-12 to 11-4
Goona . . . . .	4-0 to 5-0	4-0 to 5-0	12-0 to 15-0
Gwalior . . . . .	6 0 0	6 0 0	10-0 to 15-0
<b>Punjab—</b>			
<i>Southern—</i>			
Hissar . . . . .	5 0 0	6 0 0	10 0 0
Ferozepore . . . . .	5 5 0	5 8 0	13 0 0
Montgomery . . . . .	6 0 0	6 0 0	14 0 0
<i>Central—</i>			
Gurgaon . . . . .	6 0 0	5 0 0	11 10 0
Delhi . . . . .	5 10 0	5 10 0	11 14 0
Rohtak . . . . .	6 0 0	6 0 0	9 0 0
Karnal . . . . .	6 8 0	5 8 0	13 8 0
Lahore . . . . .	5 0 0	6 0 0	15 0 0
<i>Sub-montane—</i>			
Umballa . . . . .	7 8 0	5 0 0	10 10 0
Ludhiana . . . . .	8 0 0	6 0 0	12 3 0
Jullundur . . . . .	5 0 0	6 0 0	10 0 0
Hoshiarpur . . . . .	5 0 0	6 0 0	10 0 0
Gurdaspur . . . . .	5 0 0	5 0 0	15 0 0
Amritsar . . . . .	7 0 0	5 8 0	14 8 0
<i>Hills—</i>			
Simla . . . . .	7 8 0	6 9 0	16 14 0
Kangra . . . . .	7 8 0	5 10 0	15 0 0
<i>North-western—</i>			
Sialkote . . . . .	6 8 0	6 0 0	15 0 0
Gujranwala . . . . .	5 0 0	6 8 0	14 8 0
Gujrat . . . . .	4 0 0	4 0 0	11 0 0
Jhelum . . . . .	5 10 0	6 0 0	15 0 0
Rawalpindi . . . . .	6 0 0	8 0 0	11 5 0
Hazara . . . . .	7 0 0	7 8 0	25 0 0
Peshawar . . . . .	6 0 0	7 0 0	21 0 0
Kohat . . . . .	7 0 0	7 8 0	24 6 0

WAGES OF SKILLED AND UNSKILLED LABOUR FOR THE HALF-YEAR ENDING  
30th JUNE 1889—continued.

Divisions.	AVERAGE WAGES PER MONTH,		
	Aboriginal Agricultural Labourers,	Bye or Home-keeper,	Common Mason, Carpenter or Blacksmith.
	R a. p.	R a. p.	R a. p.
<b>Punjab—continued.</b>			
<i>Western—</i>			
Shahpur . . . . .	5 3 0	5 10 0	14 1 0
Jhang . . . . .	6 0 0	7 0 0	15 0 0
Mooltan . . . . .	8 0 0	7 0 0	17 8 0
Bannu . . . . .	6 9 0	6 8 0	22 8 0
D. I. Khán . . . . .	5 0 0	5 0 0	19 8 0
Muzaffargar . . . . .	7 8 0	6 8 0	15 0 0
D. G. Khán . . . . .	4 0 0	6 0 0	15 0 0
<i>Sind and Baluchistan—</i>			
Karachi . . . . .	12-0 to 20-0	12-0 to 15-0	30-0 to 40-0
Hyderabad (Gidu Bandar) . . . . .	12 0 0	8 0 0	30 0 0
Thar and Parkar (Umarkot) . . . . .	8-0 to 12-0	10 0 0	19-0 to 39-0
Sukkur . . . . .	8 0 0	9 0 0	30-0 to 35-0
Shikarpur . . . . .	8 0 0	8 0 0	25-0 to 30-0
Upper Sind Frontier . . . . .	10 5 0	11 4 0	18-12 to 30-0
Quetta . . . . .	15 0 0	15 0 0	35-0 to 40-0
<b>Bombay—</b>			
<i>Konkan—</i>			
Karwar . . . . .	8 0 0	7 8 0	18-12 to 22-12
Ratnagiri . . . . .	7 8 0	9 0 0	15 0 0
Colaba (Alibag) . . . . .	6-0 to 7-8	8-0 to 10-0	15-0 to 30-0
Bombay . . . . .	11 0 0	9 8 0	32-8 to 48-5-4
Tanna (Salsette) . . . . .	7 8 0	9 0 0	18-12 to 22-8
<i>Deccan—</i>			
Dharwar (Hubli) . . . . .	8 0 0	7 0 0	15-0 to 20-0
Belgaum . . . . .	6 2 0	7 4 0	16 4 0
Satara . . . . .	4 13 0	7 0 0	13-0 to 16-0
Sholapur . . . . .	7 0 0	9 0 0	25 0 0
Bijapur . . . . .	7 8 0	10 0 0	15-0 to 22-8
Poona (City) . . . . .	7 8 0	10 0 0	15-0 to 22-0
<i>Khandesh—</i>			
Ahmednagar . . . . .	7 8 0	10 0 0	22 0 0
Nasik . . . . .	9 0 0	9 0 0	15-0 to 30-0
Khandesh (Dhulia) . . . . .	7 0 0	9 0 0	14-0 to 30-0
<i>Gujarat—</i>			
Surat . . . . .	5-0 to 8-0	8-0 to 10-0	15-0 to 30-0
Broach . . . . .	7 8 0	7 8 0	18 12 0
Kaira . . . . .	7 8 0	8 0 0	9-6 to 15-0
Baroda Camp (Sadar Bazar) . . . . .	7 8 0	7 0 0	22 8 0
Ahmedabad (Daskrohi) . . . . .	7 8 0	7 0 0	18 12 0
Panch Mahals (Godhra) . . . . .	5 10 0	7 0 0	13-0 to 18-12
Deesa Cantonment . . . . .	5 10 0	7 0 0	18 12 0
<i>Kathiawar—</i>			
Rajkot . . . . .	10 0 0	8 0 0	13-0 to 22-8
<b>Central Provinces—</b>			
<i>Western—</i>			
Nimar . . . . .	6 0 0	6 0 0	15 0 0
Khandwa-Aisirgarh Cantonment . . . . .	6 0 0	6 0 0	15 0 0
Hoshangabad . . . . .	6 0 0	6-0 to 7-0	12-0 to 30-0
Betul . . . . .	4 0 0	6 0 0	15 0 0
Chhindwara . . . . .	4-0 to 5-0	4-0 to 6-0	10-0 to 15 0
Nagpur . . . . .	4 0 0	5 0 0	15 0 0
Wardha . . . . .	4 0 0	6 0 0	15 0 0
<i>Central—</i>			
Narsinghpur . . . . .	3 12 0	6 0 0	11-0 to 15-0
Saugor . . . . .	4 0 0	6 0 0	10-0 to 12-0
Damoh . . . . .	4 8 0	6 0 0	10-0 to 13-0
Jubbulpore . . . . .	3-0 to 4-0	5-0 to 6-0	10-0 to 15-0
Mandla . . . . .	4 0 0	5 0 0	10 0 0
Seoni . . . . .	4 0 0	6 0 0	11 0 0
Balaghāt . . . . .	3 0 0	4 0 0	12 0 0
Bhandāra . . . . .	4 0 0	6 0 0	15 0 0
Chānda . . . . .	4 0 0	6 0 0	12-0 to 15-0



**WAGES OF SKILLED AND UNSKILLED LABOUR FOR THE HALF-YEAR ENDING**  
**30th JUNE 1889—concluded.**

DISTRICTS.	AVERAGE WAGES PER MONTH.		
	Able-bodied Agricultural Labourer.	Spec. or Horse-keeper.	Common Mason, Carpenter or Blacksmith.
<b>Central Provinces—continued.</b>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>
<b>Eastern—</b>			
Bilaspur . . . . .	4 0 0	6 0 0	15 0 0
Raipur . . . . .	5 0 0	7-0 to 8-0	12-0 to 20-0
Sambalpur . . . . .	3 8 0	4 0 0	8-0 to 15-0
<b>Benar—</b>			
Buldāna . . . . .	5 10 0	7 8 0	18 12 0
Bāsim . . . . .	5 0 0	7 0 0	15 0 0
Akola . . . . .	7 0 0	7 0 0	22 8 0
Etlichpur . . . . .	5 10 0	6 0 0	22 8 0
Amrāoti . . . . .	7 8 0	8 0 0	22 8 0
Wān . . . . .	6 0 0	7 0 0	15 0 0
<b>Nizam's Territories—</b>			
Secunderabad . . . . .	5-0 to 7-0	5-0 to 7-0	13-0 to 30-0
Bolārām . . . . .	6-0 to 8-0	—	15-0 to 22-8
Chadarghat . . . . .	7 8 0	8 0 0	15 0 0
<b>Madras—</b>			
<b>Malabar Coast—</b>			
Malabar . . . . .	6 3 7	6 9 0	13 2 6
S. Canara . . . . .	6 14 0	6 12 0	18 2 0
<b>South, central—</b>			
Coimbatore . . . . .	4 9 0	5 13 4	17 8 0
Nilgiris . . . . .	7 2 0	8 10 0	27 2 0
Salom . . . . .	3 10 8	5 5 4	12 13 4
<b>Central—</b>			
Bellary . . . . .	5 5 0	7 0 0	15 0 0
Anantapur . . . . .	5 0 0	7 0 0	15 0 0
Cuddapah . . . . .	7 8 0	7 8 0	15 0 0
Kurnool . . . . .	6 4 0	6 5 0	19 12 8
<b>East Coast, north—</b>			
Gaujam . . . . .	3 12 0	6 0 0	10 0 0
Vizagapatam . . . . .	4 8 0	4 8 0	11 0 0
Godāvari . . . . .	5 2 8	5 5 4	15 0 0
<b>East Coast, central—</b>			
Kistna . . . . .	6 0 0	7 5 4	16 10 8
Nellore . . . . .	5 8 0	6 4 0	16 10 8
<b>East Coast, south—</b>			
Madras . . . . .	5 0 0	5 8 0	14 1 0
Chingleput . . . . .	4 8 0	5 0 0	13 8 0
N. Arcot . . . . .	5 6 4	6 0 0	15 11 6
S. Arcot . . . . .	5 6 4	6 3 4	12 11 4
Tanjore . . . . .	6 0 1	6 3 2	14 13 11
Trichinopoly . . . . .	4 11 0	6 8 0	12 3 0
<b>Southern—</b>			
Tinnevelly . . . . .	5 4 0	6 13 4	12 6 8
Madura . . . . .	5 8 6	5 12 0	14 6 0
<b>Mysore—</b>			
Mysore . . . . .	7 8 0	6 0 0	15 0 0
Bangalore . . . . .	4-0 to 8-0	7 0 0	10-0 to 23-0
Kolar . . . . .	7 0 0	7 0 0	15 0 0
Tāmkur . . . . .	7 8 0	6 0 0	15-0 to 22-0
Hassan . . . . .	2-8 to 5-0	5-0 to 6-0	15-0 to 22-8
Kadur . . . . .	7 8 0	7 8 0	22 8 0
Shimoga . . . . .	2-8 to 5-0	3-0 to 8-0	10-0 to 25-0
Chitsidrug . . . . .	5 0 0	7 0 0	15 0 0
<b>Coorg—</b>			
Coorg . . . . .	7 8 0	8 0 0	21 8 0
<b>Alex</b>	.....	10 0 0	30-0 to 37-8

E. J. SINKINSON,  
 Secretary to the Government of India.

DEPARTMENT OF FINANCE AND COMMERCE,  
 (Statistical Branch.)

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
CIVIL WORKS—Irrigation.

STATEMENTS OF IRRIGATION OPERATIONS IN BENGAL FOR THE RABI SEASON OF 1888-89.  
GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.  
IRRIGATION OPERATIONS FOR THE RABI SEASON 1888-89.  
*Comparative Statement of Irrigation and Rainfall in Canal Districts of Bengal*

No. I.—RABI STATEMENT.

District.	Area in acres.	Culturable acres.	AREA IRRIGATED.		1888-89 AS COM- PARED WITH 1887-88.		RAINFALL FOR FOUR MONTHS.								REMARKS.	
			1887-88. Acres.	1888-89. Acres.	Increase. Decrease.	November.		December.		January.		February.		TOTAL.		
						1887.	1888.	1887.	1888.	1888.	1889.	1888.	1889.			
																In.
Cuttack			600	2,835	7,235	...	...	...	...	...	...	...	...	...	...	Average rainfall of the 11 sta- tions in the Cuttack district.
Balasore			126	138	12	...	...	...	...	...	...	...	...	...	...	Average rainfall at Bhuddimuck and Acquapadda stations.
Midnapore			...	3,369	13,369†	...	...	...	...	...	...	...	...	...	...	No rain-gauge stations on the Tidal Reaches of the Midha- pore Canal.
Huoghly			...	...	...	...	...	...	...	...	...	...	...	...	...	Rainfall at Daudnagar station.
Gya			3,008	5,795	1,887	...	...	...	...	...	...	...	...	...	...	Ditto at Bankipore station.
Panna			2,336	5,637	3,101	...	...	...	...	...	...	...	...	...	...	Ditto at Arrah station.
Shahabad			49,646	87,718	38,072	...	...	...	...	...	...	...	...	...	...	Ditto at Gopalgunj station.
Sarun			2,314	3,170	856	...	...	...	...	...	...	...	...	...	...	
Total			59,130	1,08,662	49,532*	...	...	...	...	...	...	...	...	...	...	

Note.—The figures for 1887-88 as now given are correct.  
\* 1,162 acres irrigated with boro rice during the rabi season 1887-88, were included in the area shown as irrigated during the Kharif season of that year.  
† Boro rice.

CALCUTTA,  
The 17th September 1889.

C. H. DEMELLO,  
Offg. Under-Secy. to the Govt. of Bengal, P. W. D.

NO. II.—RABI STATEMENT.

IRRIGATION OPERATIONS OF FASL RABI, 1888-89.

Statement in acres of crops irrigated in Canal Districts.

Nature of Crops.	Cuttack.	Balasore.	Midnapore.	Hooghly.	Gya.	Patna.	Shahabad.	Saran.	Total.
Garden and orchards	102	..	..	..	..	..	25	..	127
Sugarcane	55	138	..	..	..	..	..	..	193
Cereals	..	..	..	..	577	399	41,766	1	42,743
Wheat	..	..	..	..	1,792	2,485	11,244	2,818	18,339
Barley	..	..	..	..	..	..	..	..	3,369
Rice	..	..	3,359*	..	..	..	..	12	4,941
Miscellaneous	..	..	..	..	..	..	..	..	4,953
Gram, &c.	..	..	..	..	444	1,058	5,071	..	6,573
Miscellaneous	286	..	..	..	2,699	986	11,046	..	15,017
Fodder crops	25	..	..	..	..	..	..	3	28
Grass, lucerne	2,124	..	..	..	..	..	..	..	2,125
Fibres	141	..	..	..	..	..	..	..	141
Dyes	45	..	..	..	..	..	..	..	45
Drugs	..	..	..	..	23	709	793	295	2,080
Opium, &c.	..	..	..	..	..	..	..	41	41
Tobacco, &c.	..	..	..	..	..	..	216	..	218
Mustard, &c.	2	..	..	..	..	..	..	..	44
Oilseeds	44	..	..	..	..	..	..	..	12,626
Castor	11	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..
Hot-weather	..	..	..	..	..	..	..	..	..
TOTAL RABI, 1888-89	2,835	138	3,369	..	5,795	5,637	87,718	3,170	108,662
TOTAL RABI, 1887-88	600	126	..	..	3,908	2,536	49,646	2,314	59,130

\* Boro rice.

CALCUTTA  
The 17th September 1889.

C. H. DEMELLO,  
Offg. Under-Secy. to the Govt. of Bengal, P. W. D.

No. III.—RABI STATEMENT. IRRIGATION OPERATIONS OF FASL RABI, 1888-89.  
Statement in acres of crops irrigated by Canals in Canal Divisions.

NATURE OF CROPS.	TALDUNDA CANAL.	KENDRAPARA CANAL.	HIGH LEVEL CANAL, RANGE I.	HIGH LEVEL CANAL, RANGE II.	HIGH LEVEL CANAL, RANGE III.	MIDNAPORE CANAL.	PATNA CANAL.	ARRAH CANAL.	BUXAR CANAL.	SARUN CANAL.	TOTAL.	REMARKS.
	Mahanuddy.	Brahmince-Byturnee.	Acquapadda-Jajepore.	Cossye.	Eastern Sone.	Arrah.	Buxar.	Gunduck.				
Garden and orchards	31	65	6	...	...	2	23	...	...	...	127	
Sugarcane	14	41	138	...	...	...	...	...	...	...	193	
Cereals	...	...	...	...	...	11,342	30,424	1	...	...	42,743	
Wheat	...	...	...	...	...	7,780	3,464	2,818	...	...	18,339	
Barley	...	...	...	...	...	...	...	...	...	...	3,369	
Rice	...	...	...	...	...	...	...	...	...	...	4,953	
Miscellaneous	...	...	...	...	...	1,123	3,818	12	...	...	6,573	
Gram, &c.	...	...	...	...	...	1,933	3,138	...	...	...	15,017	
Pulse	84	202	...	...	...	10,468	578	...	...	...	28	
Miscellaneous	...	...	...	...	...	...	...	...	...	...	2,125	
Fodder crops.	1	...	...	...	...	...	...	...	...	...	141	
Grass, lucerne	...	...	...	...	...	...	...	...	...	...	45	
Fibres	100	2,024	...	...	...	...	...	...	...	...	2,080	
Indigo	...	141	...	...	...	...	...	...	...	...	41	
Dyes	...	44	...	...	...	...	...	...	...	...	218	
Turmeric, &c.	...	...	...	...	...	...	...	...	...	...	44	
Opium	...	...	...	...	...	577	216	295	...	...	12,626	
Drugs	...	...	...	...	...	...	...	41	...	...	...	
Tobacco, &c.	...	...	...	...	...	...	...	...	...	...	...	
Mustard, &c.	...	2	...	...	...	5	211	...	...	...	...	
Oilseeds	...	44	...	...	...	...	8,355	...	...	...	...	
Castor	...	...	...	...	...	4,260	...	...	...	...	...	
Miscellaneous	11	...	...	...	...	...	...	...	...	...	...	
Hot-weather	...	...	...	...	...	...	...	...	...	...	...	
TOTAL RABI, 1888-89	242	2,563	168	3,369	11,432	37,491	50,227	3,170	1,08,662	...	...	
TOTAL RABI, 1887-88	159	441	126	...	6,444	19,197	30,449	2,314	59,130	...	...	

• Bora rice.

CALCUTTA,

The 17th September 1889.

C. H. DEMELLO,  
Offg. Under-Secy. to the Govt. of Bengal, P. W. Dept.

## GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

NO. I.—ANNUAL STATEMENT. IRRIGATION OPERATIONS FOR THE YEAR 1888-89.  
*Comparative Statement of Irrigation and Rainfall for the years 1887-88 and 1888-89, in Canal Districts of Bengal.*

Districts.	Area in acres.	Culturable acres.	AREA IRRIGATED.										WHOLE YEAR, 1888-89.				RAINFALL.		
			KHARIF, 1888-89.			RABI, 1888-89.			TOTAL AREA.	In comparison with 1887-88.		TOTAL AREA.	In comparison with 1887-88.		Percent- age of increase or decrease.	1887-88.	1888-89.	Percent- age of increase or decrease.	
			TOTAL AREA.	In comparison with kharif, 1887-88.		TOTAL AREA.	In comparison with 1887-88.			Increase.	Decrease.		Increase.	Decrease.					
				Increase.	Decrease.		Increase.	Decrease.											Increase.
1	2	3	4	5	6	7	8	9	10	11	12.	13	14	15	16				
Cuttack	} Inform- ation not available.	Inform	129,631	40,464	...	2,835	2,235	...	132,466	42,699	...	+32.2	32.66	43.81	34.1				
Balasore		...	23,578	13,868	...	138	12	...	23,716	13,880	...	+58.5	33.56	42.53	26.7				
Midnapore		...	54,551	...	10,334	3,369	3,369	...	57,920	...	6,965	-12.0	41.77	57.92	38.6				
Hooghly		...	502	...	45	...	...	...	502	...	45	-8.9	...	...	...				
Gya		...	27,600	...	1,748	5,795	1,887	...	33,395	139	...	+0.4	21.55	46.71	116.7				
Patna		...	1,229,920	...	2,737	5,637	5,637	...	33,783	5,838	...	...	+17.2	21.49	45.90	113.5			
Shahabad	...	2,806,400	...	2,396	...	87,718	38,072	...	294,647	40,468	...	+13.5	26.06	44.84	72.0				
Sarun	...	1,680,000	...	3,935	...	3,170	856	...	9,009	4,791	...	+53.1	33.22	35.33	6.4				
TOTAL	...	...	476,776	63,400	12,127	108,662	49,532	...	585,438	107,815	7,010	+17.2	...	...	...				
			NET INCREASE . 51,273			NET INCREASE . 49,532			NET INCREASE . 100,805										

CALCUTTA,  
 The 17th September 1889.

C. H. DEMELLO,  
 Offg. Under-Secy. to the Govt. of Bengal, P. W. D.

NO. II.—ANNUAL STATEMENT.  
IRRIGATION OPERATIONS FOR THE YEAR 1888-89.  
Statement in acres of crops irrigated in the Canal Districts.

NATURE OF CROPS.	Cuttack.	Balasore.	Midnapore.	Hooghly.	Gya.	Patna.	Shahabad.	Saran.	TOTAL.
Garden and orchards	102	138	...	...	2,560	1,614	25	...	127
Sugarcane	55	...	...	...	577	399	18,938	8	23,313
Cereals	...	...	...	...	1,792	2,485	41,766	1	42,743
Wheat	...	...	...	...	...	...	11,244	2,818	18,339
Barley	...	...	...	...	...	...	175,820	5,674	44,400
Rice	129,631	23,578	57,920	502	24,790	26,485	5,343	135	5,775
Miscellaneous	...	...	...	...	250	47	5,071	...	6,573
Gram, &c.	...	...	...	...	444	1,058	11,046	...	15,017
Miscellaneous	...	...	...	...	2,699	986	...	3	28
Grass lucerne	...	...	...	...	...	...	...	...	2,125
Cotton	...	...	...	...	...	...	...	34	175
Indigo	286	...	...	...	...	...	...	...	45
Fodder crops	25	...	...	...	...	...	...	...	2,080
Fibres	2,124	...	...	...	...	...	...	295	41
Dyes	141	...	...	...	...	...	...	41	218
Drugs	45	...	...	...	...	...	...	...	44
Opium	...	...	...	...	283	709	...	...	12,615
Turneric, &c.	...	...	...	...	...	...	...	...	11,769
Tobacco, &c.	...	...	...	...	...	...	...	...	...
Mustard, &c.	...	...	...	...	...	...	...	...	...
Castor	...	...	...	...	...	...	...	...	...
Oilseeds	...	...	...	...	...	...	...	...	...
Miscellaneous	44	...	...	...	...	...	...	...	...
Hot-weather	11	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...
TOTAL, 1888-89	132,466	23,716	57,920	502	33,395	33,783	294,647	9,009	585,438
TOTAL, 1887-88	89,767	9,836	64,885	547	33,256	27,945	254,179	4,218	484,633

CALCUTTA,  
The 17th September 1890.

C. H. DEMELLO,  
Offg. Under-Secy. to the Govt. of Bengal, P. W. D.

## IRRIGATION OPERATIONS FOR THE YEAR 1888-89.

## NO. III.—ANNUAL STATEMENT.

## Statement in acres of crops irrigated by Canals in Canal Divisions.

NATURE OF CROPS.	TALDUNDA CANAL.		KENDRAPARA CANAL.	HIGH LEVEL CANAL, RANGE I.	HIGH LEVEL CANAL, RANGE II.	HIGH LEVEL CANAL, RANGE III.	MIDNAPUR CANAL.	PATNA CANAL.	ARRAH CANAL.	BUXAR CANAL.	SARUN CANAL.	TOTAL.	REMARKS.
	Mahanuddy.		Brahmince-Byturnee.	Acquapadda-Jajepore.			Cossye.	Eastern-Sone.	Arrah.	Buxar.	Gunduck.		
Garden and orchards	31			65	6		...	...	2	23	...	127	
Sugarcane	14			41	138		...	4,174	12,378	6,560	...	23,313	
Cereals	...			...	...	...	...	976	11,342	30,424	1	42,743	
	...			...	...	...	...	4,277	7,780	3,464	2,818	18,339	
Pulse	41,339		86,278	...	25,592	...	58,422	51,275	113,005	62,814	5,674	444,400	
	...		...	...	...	...	...	297	1,222	4,121	135	5,775	
Fodder crops	...		...	...	...	...	...	1,502	1,933	3,138	...	6,573	
	84		202	...	...	...	...	3,685	10,468	578	...	15,017	
Fibres	1			...	24		...	...	...	...	3	28	
Dyes	100		2,024	...	...	...	...	...	...	...	...	2,125	
	...		141	...	...	...	...	...	...	...	34	175	
Drugs	1		44	...	...	...	...	...	...	...	...	45	
	...		...	...	...	...	...	992	577	216	295	2,080	
Oilseeds	...		...	...	...	...	...	...	...	...	41	218	
	...		2	...	...	...	...	...	5	211	...	44	
Miscellaneous	...		44	...	...	...	...	...	...	...	...	12,626	
	11		...	...	...	...	...	...	4,260	8,355	...	11,769	
Hot-weather	...		...	...	...	...	...	...	8,980	2,789	...	...	
TOTAL, 1888-89	41,581		88,841	...	25,760	...	58,422	67,178	171,954	122,693	9,009	585,438	
TOTAL, 1887-88	26,847		61,404	...	11,352	...	65,432	61,201	141,484	112,695	4,218	484,633	

CALCUTTA,

C. H. DEMELLO,

The 17th September 1889.

Offg. Under-Secy. to the Govt. of Bengal, P. W. Dept.



GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

WEATHER SUMMARY FOR SEPTEMBER 1889.

The principal meteorological features of the month of September in normal years are the retreat of the south-west monsoon from Upper and Central India and the appearance of more or less severe cyclones over the Bay of Bengal. The date of the occurrence of the former phenomenon apparently depends largely on the general strength of the monsoon during the whole period of its prevalence, but of the rules which regulate the occurrence of cyclones much less is known. The withdrawal from Central and Upper India of the moist currents from the Bombay and from the Bengal side of India occur fairly simultaneously, and is followed by fine dry weather in that region, but Bengal and Burmah continue to receive moderate general rain from the Bay current and the Konkan, Malabar, the Deccan and Southern India from the Arabian Sea current. As mentioned above, the cyclonic storms of this period are frequently of considerable severity, and give heavy and general rainfall. Their course is as a rule west-north-west from the Orissa Coast across the central parts of the country, and they are frequently remarkable for long vitality.

The present September has been remarkable for the exceptionally early cessation of the rains over a considerable portion of India. Over the whole of North-Western India (*i.e.*, the whole of the region lying to the north-west of a line joining Rajkot and Lucknow) there has been practically no rain of importance throughout the month. This has apparently arisen from two causes—the first being the excessive weakness of the Bombay current, the second the feeding of the Bay current into the various depressions, which have formed over and travelled near the Bay of Bengal. Conditions on the West Coast of the Peninsula have been very exceptional. In the ordinary course of events there should be a fairly strong south-westerly and westerly wind crossing the West Coast at this season, and rain should be general and fairly frequent. Instead of this the records of the past month have shown for the greater part of the period variable or east to north breezes of light or moderate strength, and on several days there has been a partial or complete absence of rain all along the West Coast. During the occurrence of the depressions described below, these abnormal conditions were of course modified, and an inrush of moist monsoon winds towards the depression occasioned heavy and general rain on the West Coast; but with the disappearance of the disturbances the wind returned to its abnormal directions and the rain more or less ceased.

After a short disturbed period quite at the commencement of the month the weather became settled. Very small pressure differences were accompanied with light and variable winds, and, though rain was reported from most stations (except those in the north-west), it occurred generally in passing showers, and the general weather was fair. On the 16th however conditions became unsettled over the Bay, and a brisk fall of the barometer was accompanied with the formation of a depression. An unsettled period which lasted until the 23rd then set in, during which the weather was stormy and the rainfall heavy. After the 24th or 25th the rainfall again fell off gradually, and by the end of the month the weather was again fine over the greater part of the country.

*Barometric depressions and cyclonic storms of the month.*—Three depressions were formed during the month, of these one was of very considerable importance, but the other two were small and short lived.

*Depression of 1st to 3rd September.*—At the close of August a shallow low pressure area lay over Behar and the North-Western Provinces, into which the wind from surrounding districts fed and around which rain was falling. On the 1st September a shallow but well defined disturbance formed within this low pressure area, and a cyclonic circulation of the winds was established. Moderately heavy rain fell within the storm area. The reports of the

and showed that the storm was filling up, but that heavy rain had occurred in its neighbourhood, the following being some of the principal amounts reported :

Benares	4½	inches	on the	2nd.
Jaunpur	6½	"	"	1st.
Allahabad	6½	"	"	1st and 2nd.
Sultanpur	6½	"	"	"
Pertabgarh	9½	"	"	"
Rai Bareilly	5½	"	"	"

On the morning of the 3rd the barometer was rising quickly and the depression had almost disappeared.

*Large depression of the 16th to 22nd September.*—Very uniform pressures were reported over the Bay and the surrounding coasts on the morning of the 15th—a condition which in the middle of September was almost certainly antecedent to the formation of a storm. On the 16th a depression was clearly traceable in the Bay and there was a general indraught of air towards the centre. The chart of the 17th showed that the depression had developed and that the centre of depression was in Lat.  $18^{\circ}30'$  and Long.  $88^{\circ}30'$ , where the barometer was probably falling briskly. A cyclonic circulation of moderate intensity had been formed around the Bay. On the 18th the centre of the storm was close to the coast between the stations of Gopalpore and Vizagapatam, where the barometer had fallen very rapidly. Strong cyclonic winds prevailed around and over the Bay. The storm crossed the coast in the afternoon, and moderate gales prevailed around it. The barometer at the centre probably fell below  $29^{\circ}0''$  and the storm was altogether of considerable intensity. By the morning of the 19th it had passed about 100 miles inland on a west-north-west course. Strong winds were feeding into it, and the rainfall around was very heavy. On the 20th the storm was to the south of Raipur and still maintained the same intensity. The chart of the 21st showed that the storm was filling up, and that it was passing northward towards the North-Western Provinces. A strong cyclonic circulation was still maintained around it and fairly heavy rain continued. By the morning of the 22nd the disturbance had reached the foot of the Hills in the neighbourhood of Gorakhpur and by the following morning it had broken up. It continued to give very heavy rain up to the time of its disappearance. The following returns show approximately the amount of the depression of the barometer below the normal during the course of the storm, but as the actual centre was on no occasion actually over one of the meteorological stations at the hour of observation, the result is only a rough approximation :

On the 17th	{ Gopalpore	.	.	.	.	—051"
	{ Vizagapatam	.	.	.	.	—048"
" 18th	{ Gopalpore	.	.	.	.	—193"
	{ Vizagapatam	.	.	.	.	—217"
" 19th	{ Gopalpore	.	.	.	.	—235"
	{ Vizagapatam	.	.	.	.	—226"
" 20th	Raipur	.	.	.	.	—254"
" 21st	Seoni	.	.	.	.	—151"
" 22nd	Gorakhpur	.	.	.	.	—208"

Heavy rainfall was more or less confined to a comparatively narrow band in the direct path of the storm. Ankapalli received about 20 inches and Vizagapatam about 10 inches on the 18th and 19th. The Central Provinces (east and south) received between 4 and 6 inches on the 20th and 21st and the Gorakhpur, Basti and Azamgarh districts of the North-Western Provinces received between 6 and 13 inches of rain between the 22nd and 23rd.

*Shallow depression of 25th to 28th September.*—On the 25th a large shallow area of low pressure was formed over the Bay, Burmah and South Bengal, and appearances on this day favoured the production of another considerable depression. The reports of the 26th showed, however, that the barometer was rising all round the Bay, so that the disturbance never developed but drifted slowly northward into Bengal, and broke up on the 27th or 28th. No rain of any consequence fell with this depression.

Pressure has been remarkably high over the greater part of Northern and Central India. Notwithstanding the influence of the depressions noticed above, and which was almost entirely confined to Northern India, the results at the close of the month show that over the whole of Northern India, excepting the north-west of the Punjab, Sind and Guzerat, but including the Circars; the north of the

Bay and Burmah the mean barometer was above the normal, while over the Peninsula on the contrary and more particularly on the Malabar Coast it was largely in defect.

The following table gives the barometric anomalies or local pressure variations in different parts of the country for September with those for June, July and August for comparison:

PROVINCE.	BAROMETRIC ANOMALY.			
	June 1889.	July 1889.	August 1889.	September 1889.
Burmah . . . . .	+ '011	+ '004	+ '008	+ '006
Bengal . . . . .	+ '008	+ '017	- '014	+ '013
Assam . . . . .	+ '019	+ '019	+ '002	+ '007
Behar and Chutia Nagpur . . . . .	+ '006	+ '019	- '007	+ '008
North-Western Provinces . . . . .	+ '003	+ '015	+ '005	+ '011
Punjab . . . . .	- '016	- '004	+ '019	+ '003
Sind and Rajputana . . . . .	- '013	+ '005	+ '005	+ '001
Central India . . . . .	- '001	+ '012	- '001	+ '011
Central Provinces . . . . .	- '004	+ '005	- '048	+ '015
Bombay . . . . .	- '001	- '025	+ '002	- '035
Madras . . . . .	- '002	- '026	+ '012	- '017

The principal features of the above table are the change in pressure over the Central parts of the country, the steadiness of the excess in Upper India and the considerable deficiency in the south and west of the Peninsula.

*Temperature.*—The most remarkable point about the temperature conditions of the month is the large diurnal range of temperature which has been reported over Northern India. With the early clearing of the sky nocturnal radiation apparently set in with unusual energy, and the night temperatures, more particularly towards the close of the month, were most unusually low. The variation of the mean temperature for each week and for the month from the mean is given in the following table:

PROVINCE.	DIFFERENCE OF MEAN TEMPERATURE FROM NORMAL FOR WEEK ENDING SEPTEMBER				Difference of mean temperature from the Normal for the month.
	9th	16th	23rd	30th	
Burmah . . . . .	+0'7	+1'6	-0'1	-1'0	+0'2
Bengal . . . . .	-0'6	-0'5	-0'9	+1'0	-0'4
North-Western Provinces . . . . .	+0'1	+0'2	+0'2	-0'7	-0'1
Punjab . . . . .	+1'6	+2'0	+1'0	-0'8	+0'8
Bombay . . . . .	+1'9	+2'9	+2'0	+0'9	+1'5
Central Provinces and Berar . . . . .	+1'0	+1'9	+2'2	+2'1	+1'6
Guzerat and Central India . . . . .	-0'1	+1'7	+2'9	+1'6	+1'3
Sind and Rajputana . . . . .	-0'3	+1'3	+3'5	+0'6	+1'2
Madras . . . . .	-0'4	+0'1	-0'7	-0'9	-0'2

*Rainfall.*—The distribution, &c., of rain during the past month has been largely described in the earlier portions of this summary. Briefly, the returns show that the rains ceased early and were consequently light over nearly the whole of Northern and Central India, the exceptions being the Trans-Gangetic portions of the North-Western Provinces, Behar, North Bengal and Assam. Of these the first three regions were under the influence of the two depressions noticed above, and the excess of rainfall is due to this cause. The Indian Peninsula, with the exception of the Konkan, had generally heavy rain, the excess ranging from about  $\frac{1}{2}$  inch in the Carnatic to nearly 9 inches in Malabar. In Ceylon the rainfall was even heavier, the returns from Colombo showing that at that station the month's fall was more than five times the normal amount. In Burmah the fall almost exactly equalled the average.

The following table gives complete data, and shows the actual average rainfall and the normal rainfall of the month of the twenty-one districts into which the country is divided, so far as it is indicated by the telegraphic reports of a few stations in each district:

DISTRICTS.	Number of Stations.	Normal Average Rainfall in September.	Actual Average Rainfall in September 1889.	Difference from the Average in September 1889.
Punjab, West	7	2'44	0'58	— 1'86
„ East	4	3'92	0'71	— 3'21
North-Western Provinces, Trans-Gangetic	8	7'07	7'60	+ 0'53
„ „ Cis-Gangetic	3	5'35	2'63	— 2'72
Behar	2	6'92	10'50	+ 3'58
North Bengal	3	13'19	14'75	+ 1'56
Assam—Cachar	3	13'44	14'77	+ 1'33
Lower Bengal and Chutia Nagpur	8	10'08	7'95	— 2'13
Orissa—North Circars	5	8'30	8'14	— 0'16
Central Provinces, South	7	9'54	4'33	— 5'21
Berar—Khandeish	2	6'31	4'06	— 2'25
Rajputana, Central India, Saugor, and Nerbudda.	9	5'03	1'90	— 3'13
Sind—Cutch	3	0'57	0	— 0'57
Guzerat	3	5'26	2'53	— 2'73
Konkan	4	10'67	5'73	— 4'94
Deccan—Hyderabad	5	6'06	9'52	+ 3'46
Malabar	5	10'29	19'20	+ 8'91
Mysore—Bellary	4	5'04	10'02	+ 4'98
Carnatic	6	3'73	4'34	+ 0'61
Lower Burmah	7	16'57	16'60	+ 0'03
Ceylon	1	4'67	25'40	+ 20'73

W. L. DALLAS,

SIMLA, 24th October, 1889.

Assistant Meteorological Reporter to the  
Government of India.

J. W. P. MUIR-MACKENZIE,

Officiating Secretary to the Government of India.

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

Weather Review of India for the week ending at 8 a.m. on Monday,  
October 28th, 1889.

The weather over the greater part of India has been finer and more settled than is ordinarily the case even at this fine season of the year. Western and Central India has been the seat of a slight anticyclone or high pressure area, while the whole of North-Western India has experienced steady and uniform pressures, so that the slight showers which not uncommonly occur about this time—more particularly in the mountain and submontane regions—have been absent this year. In strong contrast to these fine conditions has been the weather prevailing over and around the head of the Bay of Bengal, where a storm of considerable intensity has given strong squally winds and exceptionally heavy rain. This storm took a somewhat unusual course for this time of year and passed into East Bengal. This unusual course had a very important influence on the weather occasioning heavy rain around the head of the Bay, where it is ordinarily fine, and occasioning fine weather on the Coromandel Coast, where it is ordinarily rainy, at this season. In most years the moist south-west winds which prevail over the south, south-east and east of the Bay during the latter half of October curve to the westward over the centre of the Bay, and blowing on to the Coromandel Coast as north-east winds occasion the heavy rains which are characteristic of that coast at this time. In the present year, instead of recurving, these winds have fed into the depression at the head of the Bay, while north-westerly winds with a land origin have prevailed over Madras and brought fine dry weather.

The chart of the 22nd showed a large area of low pressure overlying East and South Bengal, Orissa, the Circars and the head of the Bay into which there was a steady indraught of wind from all directions. Moderately steep gradients for northerly winds prevailed over the central parts of India and of the Peninsula and winds from between north and west prevailed there, while both in North-West India and on the West Coast variable airs and calms predominated. On the morning of the 23rd the barometer was falling quickly over the head of the Bay, and the definition of the storm had increased very considerably and a small storm centre apparently lay in Long. 88° and Lat. 20°. The winds were cyclonic at the head of the Bay, but very feeble. Elsewhere conditions were unchanged. The chart of the 24th showed that pressure had increased at all stations. The storm at the head of the Bay was smaller than on the preceding day, and no further development had taken place. Winds remained cyclonic at the head of the Bay and there was a distinct tendency to increase in force. The normal north-westerly to westerly current of air prevailed down the Gangetic plain, and elsewhere the winds were westerly or variable. Between the 24th and 25th the storm developed a good deal. This was owing to a general rise of pressure in surrounding regions, while the barometer remained almost steady at the centre of depression. In consequence gradients increased considerably around the centre, the cyclonic circulation of the winds extended to nearly all parts of the Bay, and the force of the winds rose quickly in the north. Hitherto the storm centre had been steady off the Orissa Coast, but after 8 A.M. on the 25th it began to move north-eastward and by the morning of the 26th it had passed to the east of Saugor Island, and had apparently travelled inland over the Sunderbans. Very strong winds prevailed at the Sandheads. The chart of the 27th showed that the storm had travelled east-north-eastward and that the centre lay near Burrisal, where the barometer marked 29.60". Strong cyclonic winds prevailed all around the centre. Light variable or westerly winds prevailed in other parts of India with fine weather. By the morning of the 28th the storm had almost broken up. The cyclonic circulation had become feeble and irregular, and the north-westerly to westerly winds of the Gangetic plain, with their accompanying fine weather, were extending into Bengal.

**Temperature.**—The remarkable depression of temperature which has prevailed over the greater part of India during the past two weeks has been continued during the week under review, but there are now signs that the lowest point of the oscillation has been reached and that temperature, relatively to the average, will now begin to rise. One interesting feature of this period of depression has been the remarkable lowness of the night temperatures on the plains in comparison with those on the hills. On several occasions the minimum temperature recorded at the plains stations in the Punjab, and west of the North-Western Provinces has been several degrees lower than the temperature recorded at the same time at the hill stations of Murree and Simla.

The following table shows the variations of the mean temperature of the present and of the past week from the normal average :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah	+ 0.5°	— 0.6°
Bengal	— 0.2°	+ 1.6°
North-Western Provinces	— 2.6°	— 1.1°
Punjab	— 4.7°	— 3.1°
Bombay	— 0.5°	— 4.3°
Central Provinces	+ 0.3°	— 4.3°
Guzerat and Central India	— 1.3°	— 5.4°
Sind and Rajputana	— 4.2°	— 5.1°
Madras	— 0.7°	— 1.1°

This table shows that, except in Bengal, every Province throughout India has experienced a considerable depression of temperature during the week. It will be noticed that in the Punjab and North-Western Provinces the depression is less than it was last week, and that in the other Provinces it is greater, showing that the cold wave is apparently travelling southward.

**Rain.**—There has again been little or no rain over the greater part of India. In the immediate neighbourhood of the cyclonic storm described above the fall has been heavy, but rain did not extend to any great distance on either side of the track of the storm centre and was hence confined to a limited extent of country.

The following is a brief description of the daily distribution:—On the 22nd the weather over India being still in an unsettled state, owing to the breaking up of the depression noticed in the preceding summary, showers were reported from many parts of the country—more particularly from Bengal, the east of the North-Western Provinces, the Central Provinces, the south of the Peninsula and Burmah. The amounts were considerable in several places, especially in Lower Burmah. On the 23rd a few scattered showers were reported from Behar, one or two central stations and from the Malabar Coast; with these exceptions rain was confined to the Bay area and was not heavy. On the 24th, 25th and 26th there was no rain, except around the upper part of the Bay and in Assam and Upper Burmah. On the 27th and 28th there was heavy rain in Bengal and some showers in Assam, but no rain in any other part of India.

The table at the close of the summary shows that in seventeen rainfall divisions no rain whatever was received during the week, and that in seven other divisions the average rainfall for the week was less than one-tenth of an inch. In twelve of these twenty-four divisions the normal rainfall is either *nil* or less than one-tenth of an inch, but that this number should be doubled in the week under review is an indication of the exceptionally fine weather at present prevailing. Fifteen divisions report an excess and thirty a deficiency of rainfall during the week. The greatest excess is in Burmah and Eastern and Deltaic Bengal, where the cyclonic storm noticed above occasioned several large falls. Of these the principal are—7½ inches at Maungdaw (Akyab); 11 inches at Kushak (Tipperah); 12 inches at Perozepur (Backergunge); 8 inches at Munsheegunge (Dacca); 9½ inches at Bagerhat (Khoolna); 7½ inches at Madaripur (Faridpur); 11½ inches at Basirhat (24-Pergunnahs); and 12½ inches at Gope (Pooree).

In the south of the Peninsula and in the Central Provinces there were a few heavy showers on the first day of the week, but after the 22nd there was practically no rain, except in North-Eastern India.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING OCTOBER 18TH, 1889.			RAINFALL DATA FROM OCTOBER 1ST TO OCTOBER 18TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, October 1st to October 18th.	Excess or De- fect of (Season- ally) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH.	Tenasserim	8.78	1.22	+ 7.56	13.63	3.69	+ 269
	Lower Burmah	1.91	1.20	+ 0.71	4.37	2.88	+ 52
	Central Burmah	1.62	1.10	+ 0.52	3.09	2.30	+ 34
	Upper Burmah	0.95	?	?	1.97	?	?
	Arakan	4.14	1.65	+ 2.49	4.89	2.80	+ 75
BENGAL AND ASSAM.	Eastern Bengal	4.13	1.13	+ 3.00	4.26	2.69	+ 57
	Assam (Surma)	2.23	0.76	+ 1.47	2.35	2.17	+ 9
	Do. (Brahmaputra)	0.76	0.36	+ 0.40	0.76	1.53	- 50
	Deltaic Bengal	4.46	0.87	+ 3.53	4.72	2.18	+ 117
	Central Bengal	0.63	0.62	+ 0.01	0.73	1.90	- 59
	North Bengal	0.26	0.67	- 0.41	0.26	1.90	- 87
	Orissa	2.48	1.54	+ 0.94	3.45	2.97	+ 84
	Chutia Nagpur	0.50	0.59	- 0.09	0.77	1.18	- 35
	Behar (South)	0.36	0.53	- 0.17	0.36	1.07	- 66
NORTH - WESTERN PROVINCES AND ODDH.	Do. (North)	0	0.40	- 0.40	0	0.96	- 100
	North - Western Provinces (East).	0.52	0.49	+ 0.03	0.75	0.62	+ 21
	Oudh (South)	0.01	0.20	- 0.19	0.03	0.33	- 91
	Do. (North)	0	0.07	- 0.07	0	0.11	- 100
	North - Western Provinces (Central).	0.01	0.24	- 0.23	0.01	0.28	- 96
	North - Western Provinces (West).	0	0.02	- 0.02	0	0.02	- 100
PUNJAB.	North - Western Provinces (Submontane).	0.03	0.12	- 0.09	0.03	0.21	- 86
	Punjab (South)	0	0	0	0	0.08	- 100
	Do. (Central)	0	0	0	0	0.16	- 100
	Do. (Submontane)	0	0.00	- 0.00	0	0.01	- 100
	Do. (Hill Districts)	0	0.07	- 0.07	0	0.19	- 100
	Do. (North-West)	0	0.05	- 0.05	0	0.20	- 100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Do. (West)	0	0	0	0	0.03	- 100
	Malabar	0.18	1.44	- 1.26	7.79	3.55	+ 119
	Madras (South Central)	0.14	1.43	- 1.29	3.65	4.07	- 25
	Coorg	0.90	1.73	- 0.83	10.90	3.54	+ 208
	Mysore	0.29	1.26	- 0.98	2.06	2.29	- 10
	Konkan	0.01	0.47	- 0.46	4.84	1.08	+ 348
	Bombay Deccan	0.04	0.78	- 0.74	4.96	1.96	+ 153
	Hyderabad (North)	0	0.64	- 0.64	1.26	1.97	- 36
CENTRAL PROVINCES AND BERAR.	Khandeish	0	0.64	- 0.64	1.26	1.97	- 36
	Berar	0.47	0.43	- 0.01	3.14	1.45	+ 117
	Central Provinces (West)	0.68	0.46	+ 0.22	2.95	0.72	+ 310
	Ditto (Central)	1.12	0.38	+ 0.74	1.72	0.53	+ 225
BOMBAY (NORTH).	Ditto (East)	0.73	0.08	+ 0.65	1.35	0.43	+ 214
	Guzerat	0	0.11	- 0.11	0.02	0.31	- 94
	Kathiawar	0	0.06	- 0.06	0	0.06	- 100
RAJPUTANA AND CEN- TRAL INDIA.	Sind	0	0.02	- 0.02	0	0.02	- 100
	Central India (East)	0.05	0.23	- 0.18	0.13	0.42	- 69
	Rajputana (East), Central India (West).	0	0.12	- 0.12	0	0.21	- 100
	Rajputana (West)	0	0.04	- 0.04	0	0.07	- 100
MADRAS.	East Coast (North)	0.70	2.19	- 1.49	6.49	4.44	+ 46
	Do. (North) (d)	2.00	?	?	6.25	?	?
	Hyderabad (South)	0.53	0.43	+ 0.10	1.98	1.28	+ 55
	Madras (Central)	0	1.00	- 1.00	3.78	2.18	+ 73
	East Coast (Central)	0.84	2.16	- 1.32	7.45	4.71	+ 58
	Ditto (South)	0.07	1.75	- 1.68	2.50	3.64	- 31
	Madras (South)	0	1.61	- 1.61	0.59	3.49	- 83

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J. MUIR-MACKENZIE,

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SIMLA, 1st November, 1889.



GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weekly Report on the State of the Season and Prospects of the Crops.**

**Madras.**—*For week ending 26th October.*—No rain in Anantapur, Madrás, Trichinopoly, Madura, Tinnevely and Travancore; good in the four northern districts and South Canara; and slight elsewhere. Crops generally good, but suffering from excessive rain in Kistna, Bellary and Anantapur; withering from want of rain in South Arcot and Chingleput; and injured by insects in parts of Ganjam. Prices generally falling or stationary. Labourers employed last day of week,—on Rushikulya works, 3,158; Gopalpore Canal, 803; Ghat Roads, 2,398; other minor works, 3,226. Number on village relief on 19th October, 7,330, including 4,476 children; fed in kitchens, 3,393, including 2,429 children. Imports into Ganjam during week by sea and land 553 tons. General prospects favourable.

**Bombay.**—*For week ending 30th October.*—Slight rain during the week in parts. Cotton in Guzerat and Kathiawar, and other standing crops generally good. Harvesting and sowing operations in full progress. Fodder generally sufficient and agricultural stock good.

**Bengal.**—*For week ending 29th October.*—Fairly heavy rain has been almost general in Orissa, South-West Bengal and East Bengal, and local showers have fallen in North Bengal. The rain has done considerable good to the winter rice crop which is doing well. Prospects of the *rabi* cultivation are also improved and sowings are in active progress. In Behar, where no rain has fallen, it is wanted in some places for the rice on high lands and for the *rabi* crops. Reports of the sugarcane crop are generally satisfactory. Prices of rice are still almost stationary throughout the Province, with a tendency to fall in some districts. In the affected districts of Behar food-stocks continue to be sufficient and prices are falling; and from Durbhanga it is reported that there is plenty of work for labourers in the fields. In Muzaffarpur the daily average number of persons on relief works during the fortnight ending 15th instant was 2,765, mostly employed on the Sitamarhi Extension of the Tirhoot Railway; the daily average number in receipt of charitable relief during the same fortnight was 6,634 in Muzaffarpur and 344 in Chumparun against 10,429 and 730 respectively during the preceding fortnight.

**North-Western Provinces and Oudh.**—*For week ending 29th October.*—Weather seasonable. *Kharif* being harvested. *Rabi* sowings in progress. Supplies ample. Prices stationary. Prospects good.

**Punjab.**—*For week ending 30th October.*—No rain. Prices rising in Delhi, Umballa and Rawalpindi; stationary elsewhere. Harvesting of *kharif* and sowing of *rabi* in progress. Rain much needed for *rabi* sowings throughout the Province. Crops are said to be in good condition, though average in some districts. Pasturage or fodder sufficient throughout the Province.

**Central Provinces.**—*For week ending 30th October.*—Weather clear and cold, with slight rain in a few districts in the beginning of the week. The recent rain has done slight damage to *jowari* and cotton and somewhat retarded wheat sowings, but the injury is inconsiderable. Prospects continue good. Prices steady or falling.

**Burma.**—*For week ending 26th October.*—There was a considerable fall of rain in Lower Burma and the crop prospect is good. Rain fell in Mandalay, Ruby Mines district, Ye-u, Sagaing and to a small extent in most other districts.

of Upper Burma. The crop prospect is not bright in Shwebo owing to want of rain, and more rain is now required in Minbu, Meiktila and Yamethin; in the other districts in Upper Burma the crop prospect is good. The price of paddy has fallen 10 per cent. in Pegu and Henzada, 9 per cent. in Amherst, 15 per cent. in Bhamo, 13 per cent. in Katha, 20 per cent. in the Ruby Mines and 11 per cent. in Pyinmana. Elsewhere prices are stationary or the fluctuations are but small.

**Assam.**—*For week ending 30th October.*—Rain in most districts. Sowing of mustard and pulses continues. State and prospects of crops generally good.

**Mysore and Coorg.**—*For week ending 30th October.*—Rainfall good in Shimoga and Kadur districts, and fair in other parts of the State of Mysore. Standing crops in good condition. Harvesting operations continue. Prospects of season favourable. Prices slightly fallen in the Bangalore district.

No rain in Coorg during the week. Dry crops reaped in eastern taluks. Season favourable for standing crops.

**Berar and Hyderabad.**—*For week ending 30th October.*—Average rainfall 91 inches. *Fowari* in good condition. Picking of cotton commenced. *Rabi* sowing in progress. Prices declining. Cattle healthy. Fodder sufficient, except in Chikli.

Rainfall in Hyderabad during the week 48 inches; total since 1st January 3715 inches. Harvesting of *kharif* crops continues. Crops have suffered to some extent by excessive rainfall. *Abi* crops thriving. Preparations for sowing of *rabi* crops commenced. Prices stationary.

**Central India.**—*For week ending 30th October.*—Partial rain fell in Baghelkhand and none elsewhere. Rainfall is reported as insufficient from Gwalior and Bundelkhand, though crops have not suffered. Prices are falling in Neemuch and Jhabua, and are steady elsewhere.

**Rajputana.**—*For week ending 30th October.*—*Kharif* crops being harvested. *Rabi* sowings in progress. Total rainfall insufficient in Dholepur. Agricultural stock good. Fodder dear in Marwar and falling in Dholepur. Prices rising in Kerowlee and are steady elsewhere.

**Nepal.**—*For week ending 24th October.*—No rain. Weather clear. Foggy mornings. Prospects very satisfactory.

J. MUIR-MACKENZIE,

*Offg. Secretary to the Government of India.*

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXVII. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 6TH OCTOBER 1888.			WEEK ENDING 5TH OCTOBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 6TH OCTOBER 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 5TH OCTOBER 1889.		Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
	State Lines worked by Companies.												
19th October 1889	East Indian	1,514	7,84,397	518	1,526	(a) 6,17,255	405	2,15,20,679	526	(a) 2,17,22,426	527	2,01,747	...
19th ditto	Patna-Gya.	57	29,708	521	57	7,397	129	2,58,850	168	2,40,178	156	...	18,672
.....	Dildarnagar-Ghazipur	12	611	51	...	(b)	...	36,898	114	...	...	...	36,898
.....	Sindia	75	5,349	71	...	(c)	...	1,84,537	91	...	...	...	1,84,537
12th October 1889	Rajputana-Malwa	1,664	2,87,604	173	1,672	2,76,000	165	90,81,006	202	97,73,897	219	6,80,291	1,54,537
12th ditto	Bengal-Nagpur (d)	186	17,854	96	305	(e) 26,532	87	7,65,709	152	(e) 9,02,450	110	1,37,242	...
12th ditto	Southern Mahatla (f)	854	74,107	87	909	49,224	54	19,81,701	86	21,17,343	92	1,27,082	...
12th ditto	Do. Mysore Section	140	11,266	80	294	29,843	101	2,80,588	74	4,40,146	68	1,59,558	...
12th ditto	Indian Midland	136	10,360	76	746	(g) 48,843	66	3,50,858	97	(g) 14,11,614	79	10,54,756	...
5th ditto	Villupuram-Dharma-varam (Nellore Branch)	83	3,853	46	83	5,201	63	1,30,008	58	1,20,875	58	...	...
5th ditto	Bareilly-Pilibhit	36	1,347	37	36	1,637	43	39,236	42	49,216	53	9,980	1,135
	TOTAL	4,757	12,26,956	258	5,630	10,61,932	187	3,46,47,169	270	3,67,87,185	252	21,40,016	...
	State Lines worked by Government.												
19th October 1889	North Western (h)	2,469	4,86,273	195	2,386	5,39,341	226	1,26,79,730	190	1,38,07,137	215	11,27,407	...
12th ditto	Oudh and Rohilkhand	692	97,938	142	692	1,10,678	109	34,58,009	185	38,80,545	208	4,22,536	...
12th ditto	Bengal Central	125	26,887	213	125	18,800	130	3,62,148	107	3,90,580	126	28,441	...
12th ditto	Wardha Coal	45	15,281	340	45	16,523	367	3,78,573	312	3,89,811	323	11,238	...
12th ditto	Eastern Bengal	673	2,07,409	442	747	2,85,610	384	50,53,187	277	52,94,834	270	2,42,047	...
12th ditto	Nalhati	27	1,977	73	27	1,218	45	51,512	73	49,760	70	...	...
12th ditto	Tirhoot	271	27,002	100	273	29,003	106	8,29,814	223	9,55,041	135	1,25,227	1,751
12th ditto	Lucknow-Sitapur	105	3,482	33	105	4,306	41	1,28,926	45	1,64,258	58	35,332	...
5th ditto	Jorhat	25	1,008	40	25	1,490	59	32,141	44	33,442	45	1,301	...
5th ditto	Cherra-Companyganj	7	283	40	7	242	34	3,116	18	4,307	21	8,191	...
5th ditto	Burma (i)	392	60,817	155	553	78,303	142	14,75,511	148	22,54,059	158	7,78,548	...
	TOTAL	4,831	10,12,117	210	4,985	10,91,514	219	2,44,51,666	188	2,72,23,783	205	27,72,117	...
	Lines worked by Guaranteed Companies.												
19th October 1889	Madras	840	1,46,802	174	840	1,87,376	223	43,68,085	193	48,10,077	213	4,41,992	...
5th ditto	South Indian	654	2,05,156	161	654	2,03,457	158	29,10,109	165	30,41,103	173	1,31,084	...
12th ditto	Great Indian Peninsula	1,497	(j) 5,98,140	400	1,440	(k) 4,52,329	314	2,12,43,410	525	1,62,00,331	419	...	50,73,097
12th ditto	Bombay, Baroda and Central India (l)	461	1,64,538	357	461	1,99,000	432	61,80,283	505	64,73,933	523	1,93,650	...
	TOTAL	3,452	10,14,036	294	3,395	9,41,162	278	3,48,41,587	373	3,95,45,586	315	...	43,56,301
GRAND TOTAL (GUARANTEED AND STATE)		13,040	32,53,109	249	14,010	30,95,608	221	9,39,00,722	267	9,45,56,554	250	6,55,832	...
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	4,92,16,861	140	4,95,24,973	134	3,08,112	...
NET RECEIPTS		...	...	...	...	...	...	4,46,83,861	127	4,50,31,581	122	3,47,720	...
	Assisted Companies.												
19th October 1889	Tirakshwar	22	4,780	217	22	4,327	197	1,42,316	237	1,47,037	246	5,341	...
12th September 1889	Dibru-Sadiya	...	...	...	...	(m)	...	(n) 2,24,349	111	(o) 2,44,017	121	20,268	...
12th October 1889	Bengal and North Western	376	29,944	80	376	28,200	75	12,26,766	123	12,71,649	126	44,883	...
5th ditto	Rohilkhand-Kumaon	67	6,710	100	67	7,935	118	1,81,807	104	1,99,202	114	17,395	...
	TOTAL	465	41,434	89	465	40,462	87	17,75,238	121	18,63,125	127	87,887	...
	Native States.												
12th October 1889	His Highness the Nizam's Guaranteed	310	31,500	102	354	33,309	94	8,29,288	107	11,52,347	122	3,23,059	...
12th ditto	His Highness the Gaekwar's	59	3,097	36	59	1,730	29	67,019	42	68,364	43	1,345	...
12th ditto	His Highness the Gaekwar's Virangam	21	614	25	27	700	26	23,970	42	28,024	39	4,124	...
12th ditto	Bhavanagar-Gondal	209	32,585	156	309	18,007	58	5,21,854	99	6,77,014	96	1,55,160	...
12th ditto	Jodhpur	68	2,313	34	68	3,057	45	92,856	51	1,03,516	56	10,660	...
12th ditto	Jodhpore	124	5,500	44	124	5,700	46	1,82,564	55	1,74,210	52	...	8,354
	TOTAL	791	74,709	94	941	62,503	66	17,77,551	84	22,08,543	92	4,30,991	...

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Included with the East Indian Railway.

(c) Included with the Indian Midland Railway.

(d) Includes the Kaimi-Unaria Branch.

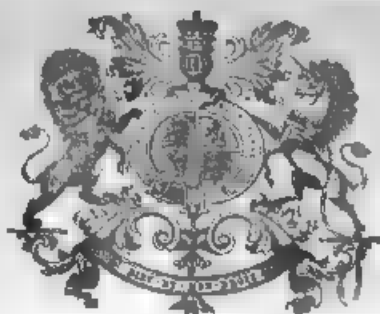
(e) Includes the Sancturia Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Tongue-Mandalay Extension.

(g) Includes the Dood-Mannad, Khinggaon, Amruti, and Bhopal-Itdam State Railways.

(h) Includes the Dood-Mannad, Khinggaon, and Amruti State Railways.

(i) Includes the Patni Branch.



SUPPLEMENT TO  
**The Gazette of India.**

No. 45.] CALCUTTA, SATURDAY, NOVEMBER 9, 1889.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem in or of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post. No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

**Weekly Report on the State of the Season and Prospects of the Crops.**

**Madras.**—*For week ending 2nd November.*—No rain in Ganjam, Cuddapah, Bellary, Anantapur, Kurnool, North Arcot, Trichinopoly, Tinnevely, and Salem; very slight elsewhere. Crops generally good, but affected by excessive rain in parts of Godavari, Kistna, Bellary, and Anantapur; paddy blighted in parts of Ganjam, Cuddapah, South Arcot, and by insects in Ganjam; crops withering from want of water in parts of Chingleput; require rain in South Arcot, North Arcot, Tanjore, Trichinopoly, Tinnevely, Coimbatore, and Salem. Price of gingelly falling or stationary. Labourers employed on last day of week on Rushikulya works, 4,848, Gopalpore Canal, 977, Ghat roads, 3,038, other minor relief works, 1,908. Number on village relief on 26th October, 511, including 299 children, fed in kitchens 2,031, including 1,467 children. Imports into Ganjam during week by sea and land 165 tons. General prospects favourable.

**Bombay.**—*For week ending 6th November.*—Slight rain during week in two districts. Early and late crops generally good, except where damaged by rats and locusts in parts of Sind. Prospects of cotton in Guzerat and Kathiawar favourable. Harvesting and sowing operations progressing generally. Fodder supply and agricultural stock good.

**Bengal.**—*For week ending 5th November.*—No rain; fine weather prevalent throughout the week. Winter rice is generally a promising crop, but in a few districts the average outturn will be rather short on account of deficient rainfall, and in places in Behar there will be some loss on the high lands owing to the failure of the *hathiya* or closing rains. All cold weather crops, including poppy and tobacco, are being sown, and sowings are germinating well. In Mozufferpore the poppy sowings are suffering from want of moisture. In Raj-

shahye ganja is being cultivated, and the weather is favourable. Sugarcane is reported to be a good crop in almost all districts. Prices of rice are almost stationary, but a slight decline has been reported from some districts. In Behar the scarcity is said to be practically at an end. In the affected districts, harvest prospects are satisfactory, ample labour is obtainable everywhere in the fields, markets are fully supplied with food, and prices are falling. Relief works and gratuitous relief are almost all closed. During the fortnight ending 31st October the daily average number of persons relieved gratuitously was 1,944 in Mozufferpore and 199 in Champaran, against 6,634 and 344 respectively, in the preceding fortnight. In Mozufferpore the daily average number on relief works during the same fortnight was 2,700, against 2,765 in the preceding fortnight.

**North-Western Provinces and Oudh.**—*For week ending 6th November.*—Favourable weather continues. The *kharif* harvest is nearly over, and the sowing of the *rabi* is progressing satisfactorily. Markets are well supplied, and prices are generally steady.

**Punjab.**—*For the week ending 6th November.*—No rain. Prices rising in Delhi, Umballa, and Rawalpindi, stationary elsewhere; harvesting of *kharif* going on; sowings of *rabi* in progress; rain much needed; prospects of the outturn of *kharif* crop is average except in Amritsar, where it is reported fair; fodder sufficient and ample throughout the province.

**Central Provinces.**—*For the week ending 6th November.*—Weather clear and cool; *juari*, rice, and other *kharif* crops are being harvested, and outturns are good; cotton is being picked; full average outturn expected; sowings of *rabi* crops continue; prospects favourable; prices steady.

**Burma.**—*For week ending 2nd November.*—Rain in all districts in Lower Burma, and the crop prospect there is generally good. In Upper Burma the rainfall was fair in Kyaukse, Meiktila, and Yamethin; elsewhere there was little or none. The rice crop has failed in parts of Shwebo, and will be below average in Minbu and Yamethin, in which districts the rainfall has been insufficient; elsewhere crops promise well. The price of paddy has fallen 14 per cent. in Tharrawaddy, 5 per cent. in Thongwa, 12 per cent. in Thayetmyo, 11 per cent. in Toungoo and Bhamo, 5 per cent. in Shwebo, 10 per cent. in Lower Chindwin, 7 per cent. in Pakokku; prices have risen in Akyab, and elsewhere are stationary.

**Assam.**—*For week ending 6th November.*—No rain. Weather seasonable. Sowing of mustard continues. Cotton being gathered in Garo Hills. Tea and winter rice crop doing well.

**Mysore and Coorg.**—*For week ending 6th November.*—Crops good, except in parts of Bangalore district, where more rain is needed. Sowing operations almost completed. Outturn of crops harvested generally favourable. No material change in prices.

No rain in Coorg. Season favourable.

**Berar and Hyderabad.**—*For week ending 6th November.*—No rain during week at Hyderabad. Harvesting of *kharif* crops continues. *Abi* crops prospering. Sowing of *rabi* commenced though retarded in some places by recent rainfall. Prices stationary.

In Berar the weather is cool. Picking of cotton commenced. *Kharif* in good condition. *Rabi* sowing continues. Fodder sufficient except in Chickli. Prices falling. Reaping of rice commenced in Bassim district.

**Central India.**—*For week ending 6th November.*—No rain during week. Crop outturn generally good, but below average in Goona. Condition of agricultural stock and pasturage generally good, but stock indifferent in Bundelkhand. Sowing of crops completed in Gwalior, and in progress elsewhere. Sowing of opium commenced in Western Malwa, Bhopawar, and Neemuch. Condition of opium in Goona good. Prices steady throughout the Agency.

**Rajputana.**—*For week ending 6th November.*—*Rabi* sowings in progress. Agricultural operations satisfactory. Agricultural stock good. Pasturage or fodder generally sufficient. Prices steady generally.

**Nepal.**—(Report not received)

J. W. P. MUIR-MACKENZIE,  
Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXVIII OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column Total Receipts from 1st April to date, audited figures have been used, as far as possible.

Total Receipts from 1st April to date, audited figures have been used, as far as possible.															
Latest Return received.	RAILWAYS.	WEEK ENDING 13TH OCTOBER 1889.				WEEK ENDING 12TH OCTOBER 1889.				TOTAL RECEIPTS FROM 1ST APRIL TO 13TH OCTOBER, 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 12TH OCTOBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.
		mean length open.	RECEIPTS		mean length open.	RECEIPTS		Total.	Per mile open per week.	Total.	Per mile open per week.				
			Total.	Per mile open.		Total.	Per mile open.								
	<i>State Lines worked by Companies</i>		£	£		£	£		£	£		£	£		
19th Oct., 1889	East Indian	1,514	7,81,369	516	1,514	(a) 6,95,219	456	2,23,02,048	529	(a) 2,24,17,643	516	1,15,307	£	£	
19th ditto	Patna-Gya	57	14,855	190	57	6,698	123	2,62,705	168	2,47,170	154	...	...	23,520	
19th ditto	Dildarnagar-Ghazipur	12	640	53	...	(b) ...	...	...	...	(b) ...	...	...	...	...	
19th ditto	Sindia	75	3,995	80	...	(c) ...	...	37,538	111	(c) ...	...	...	...	37,538	
19th ditto	Rajputana-Malwa	1,664	3,58,306	215	1,664	(c) 3,10,000	185	1,90,512	91	(c) ...	...	...	...	1,90,512	
19th ditto	Bombay-Nagpur (d)	186	18,753	101	186	(d) 23,616	97	94,429.2	203	(d) 3,31,306	218	6,57,083	...	...	
19th ditto	Southern Mahratta (f)	854	78,044	91	854	(f) 57,807	59	7,83,963	151	(f) 3,31,306	110	1,46,843	...	...	
19th ditto	Ditto Mysore Section	140	28,387	203	140	...	...	20,67,745	86	21,74,806	90	1,07,061	...	...	
19th ditto	Indian Midland	130	94.5	70	130	25,113	85	3,06,313	96	4,05,657	68	1,56,684	...	...	
19th ditto	Viluputram-Dharmavaram, Nellore Branch	83	44.5	53	83	(g) 54,735	71	1,34,413	58	(g) 14,07,531	79	11,01,108	...	...	
19th ditto	Bareilly-Pilibhit	36	1,413	39	36	6,110	74	...	...	1,36,043	59	1,638	...	...	
	<b>TOTAL</b>	<b>4,757</b>	<b>12,97,644</b>	<b>273</b>	<b>4,757</b>	<b>11,85,097</b>	<b>208</b>	<b>3,59,44,813</b>	<b>270</b>	<b>3,79,85,845</b>	<b>250</b>	<b>20,41,032</b>			
	<i>State Lines worked by Government.</i>														
19th Oct., 1889	North-Western (h)	3,469	5,02,841	204	3,469	5,71,767	240	1,31,82,571	151	1,43,78,904	216	11,96,333			
19th ditto	Oudh and Rohilkhand	992	1,11,949	162	992	1,14,938	100	35,62,958	164	39,98,392	206	4,28,434			
19th ditto	Bengal Central	125	24,892	199	125	18,130	145	3,87,040	111	4,08,719	117	21,679			
19th ditto	Wardha Coal	45	15,320	345	45	16,786	373	3,94,103	313	4,06,079	324	11,976			
19th ditto	Eastern Bengal	693	2,86,740	426	693	2,20,240	295	53,38,917	283	55,15,074	277	1,76,147			
19th ditto	Nalhati	27	2,254	83	27	1,602	59	51,765	73	51,362	70	...			
19th ditto	Tirhoot	273	25,382	97	273	25,879	95	8,16,397	122	9,80,920	133	1,24,523			
19th ditto	Lucknow-Sitapur-Sihonpur	105	4,573	44	105	5,317	51	1,33,408	45	1,69,570	58	38,073			
19th ditto	Jorhat	25	1,337	53	25	945	38	33,478	44	34,382	43	909			
19th ditto	Cherra-Companyganj	7	299	43	7	200	37	3,415	17	4,397	43	1,152			
19th ditto	Burma (i)	392	52,370	134	392	71,748	130	15,27,381	148	23,70,414	157	8,01,573			
	<b>TOTAL</b>	<b>4,833</b>	<b>10,29,367</b>	<b>213</b>	<b>4,833</b>	<b>10,47,626</b>	<b>210</b>	<b>2,54,81,033</b>	<b>189</b>	<b>2,82,77,428</b>	<b>209</b>	<b>27,96,395</b>			
	<i>Lines worked by Guaranteed Companies</i>														
19th Oct., 1889	Madras	840	1,69,556	202	840	2,07,631	247	45,12,641	193	50,14,700	214	4,77,059			
19th ditto	South Indian	654	1,10,350	169	654	1,10,211	169	30,30,480	165	31,52,332	173	1,21,843			
19th ditto	Great Indian Peninsula	1,504	(j) 6,47,030	430	1,504	(h) 4,03,047	322	(j) 2,68,904,440	521	(h) 1,60,80,228	415	52,04,212			
19th ditto	Bombay, Baroda and Central India (k)	461	2,04,442	443	461	2,27,000	492	61,84,725	502	67,00,714	522	2,15,980			
	<b>TOTAL</b>	<b>3,459</b>	<b>11,21,408</b>	<b>327</b>	<b>3,459</b>	<b>10,07,889</b>	<b>297</b>	<b>3,59,33,245</b>	<b>371</b>	<b>3,15,53,974</b>	<b>334</b>	<b>43,79,321</b>			
	<b>GRAND TOTAL (GUARANTEED AND STATE)</b>	<b>13,049</b>	<b>34,58,410</b>	<b>265</b>	<b>13,049</b>	<b>32,41,212</b>	<b>230</b>	<b>9,73,59,141</b>	<b>267</b>	<b>9,78,17,297</b>	<b>255</b>	<b>4,58,156</b>			
	<b>GROSS ESTIMATED EXPENSES</b>							<b>5,09,40,875</b>	<b>140</b>	<b>5,11,87,952</b>	<b>133</b>	<b>2,38,077</b>			
	<b>NET RECEIPTS</b>							<b>4,64,09,266</b>	<b>127</b>	<b>4,66,29,345</b>	<b>122</b>	<b>2,20,070</b>			
	<i>Assisted Companies</i>														
19th Oct., 1889	Tarakshwar	22	6,193	284	22	4,818	219	1,48,500	238	1,58,475	245	3,966			
19th ditto	Dibru-Sadiya	78	8,647	111	78	7,251	93	2,42,679	111	2,61,828	120	19,149			
19th ditto	Bengal and North-Western	376	27,568	73	376	27,960	74	12,54,034	119	12,99,609	113	45,275			
19th ditto	Rohilkhand-Kumaon	67	10,118	157	67	7,940	119	1,91,325	106	2,07,700	115	15,465			
	<b>TOTAL</b>	<b>543</b>	<b>52,926</b>	<b>97</b>	<b>543</b>	<b>47,969</b>	<b>85</b>	<b>18,37,347</b>	<b>141</b>	<b>19,21,701</b>	<b>127</b>	<b>83,831</b>			
	<i>Native States.</i>														
19th Oct., 1889	His Highness the Nizam's Guaranteed	310	38,874	125	310	40,879	115	8,68,162	108	11,98,226	122	3,30,064			
19th ditto	His Highness the Gaekwar's	59	2,684	45	59	2,620	44	69,703	42	71,093	43	1,390			
19th ditto	His Highness the Gaekwar's Viramgam	21	737	35	21	750	28	24,707	41	28,916	39	4,209			
19th ditto	Mehsana-Vadnagar	209	16,862	81	209	19,250	59	5,38,717	98	6,94,580	94	1,55,831			
19th ditto	Bhavanagar-Gondal	68	2,766	41	68	2,437	43	95,622	50	1,00,479	50	10,857			
19th ditto	Junagadh-Porbandar	124	6,050	49	124	7,400	60	1,88,614	54	1,81,773	53	6,811			
19th ditto	Murvi														
19th ditto	Jodhpore														
	<b>TOTAL</b>	<b>971</b>	<b>67,973</b>	<b>86</b>	<b>971</b>	<b>73,830</b>	<b>77</b>	<b>17,83,525</b>	<b>84</b>	<b>22,81,030</b>	<b>91</b>	<b>4,97,511</b>			

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Includes with East Indian Railway.

(c) Includes with Indian Midland Railway.

(d) Includes the Katoch-Umaria Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kistna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(i) Includes the Toungon-Mandalay extension.

(j) Includes the Dhond-Manmad, Khamsaon, Amraoti and Bhopal-Itarsi State Railways.

(k) Includes the Dhond-Manmad, Khamsaon and Amraoti State Railways.

(l) Includes the Patni Branch.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

CALCUTTA,

The 7th November, 1889.

GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 2nd HALF OF SEPTEMBER 1889.

QUANTITIES PER RUPEE IN SEER OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEAT SALT.		RICE, COMMON.		JOWAR OR CHOLU ( <i>Sorghum vulgare</i> ).		BAJRA OR CUMBU ( <i>Pennisetum typhoides</i> ).		MARUA OR BADI ( <i>Eleusine indica</i> ).		KANGRI OR KALIAN MILLET ( <i>Setaria indica</i> ).		GRAM, CHANA, CHOLA, KADALAY OR SUNAGA ( <i>Cicer arvensis</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARHAR, OR TUR, CADIAN PEA ( <i>Cajanus indicus</i> ).		FIREWOOD.		SALT.	
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.
<b>Burma—</b>																										
<i>Tenasserim—</i>																										
Mergui . . . . .	...	...	...	...	10 10	9 14	11 5	10 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	428 0	428 0	9 11	9 11
Tavoy . . . . .	...	...	...	...	11 15	11 4	13 4	12 9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	300 3	300 3	16 1	16 1
Moulmein and Amherst . . . . .	7 14	7 14	...	...	9 0	9 0	10 2	10 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	220 0	220 0	20 8	20 8
<i>Pegu (deltaic)—</i>																										
Pegu . . . . .	...	...	...	...	8 14	9 14	10 14	10 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	93 0	93 0	14 9	14 9
Rangoon . . . . .	...	...	...	...	10 6	11 2	11 2	12 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	14 9	14 9
Thongwa . . . . .	...	...	...	...	9 9	9 8	10 8	10 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	14 4	14 4
Bassein . . . . .	...	...	...	...	12 5	12 5	14 12	14 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	231 15	231 15	13 7	13 7
<i>Pegu (inland)—</i>																										
Shwepyithar . . . . .	...	...	...	...	9 13	9 1	10 6	9 9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	14 2	14 2
Tharawadi . . . . .	...	...	...	...	11 7	10 10	13 5	11 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	450 0	450 0	13 3	13 3
Henzada . . . . .	...	...	...	...	10 4	11 0	13 0	14 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	183 8	183 8	17 11	17 11
Prome . . . . .	...	...	...	...	9 6	8 6	13 10	11 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	167 9	167 9	14 3	14 3
Tsongoo . . . . .	...	...	...	...	9 2	9 2	12 13	12 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200 0	200 0	14 1	14 1
Thayemye . . . . .	...	...	...	...	9 10	9 10	11 4	11 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	326 11	326 11	11 3	11 3
<i>Upper Burma—</i>																										
Mandalay . . . . .	...	...	...	...	11 5	11 1	12 11	12 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	70 0	70 0	17 12	17 12
<i>Arakan—</i>																										
Sundowny . . . . .	...	...	...	...	19 10	16 9	22 11	19 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	469 11	469 11	24 0	24 0
Kyaukseya . . . . .	...	...	...	...	14 4	15 0	18 8	16 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	333 0	333 0	30 0	30 0
Akyab . . . . .	...	...	...	...	12 8	12 8	15 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	16 0	16 0
<b>Assam—</b>																										
<i>Sirma—</i>																										
Sylhet . . . . .	...	...	...	...	10 8	12 4	12 4	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	108 0	108 0	9 13	9 13
Cachar . . . . .	...	...	...	...	9 0	11 0	10 0	13 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 8	9 8
Khasi and Jaintia Hills . . . . .	...	...	...	...	5 0	5 0	7 0	8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100 0	100 0	7 0	7 0
Garo Hills . . . . .	...	...	...	...	6 0	6 0	10 0	8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	6 7	6 7
<i>Brachmaputra—</i>																										
Golapara . . . . .	...	...	...	...	8 0	8 0	13 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	8 0	8 0
Kamrup . . . . .	...	...	...	...	8 0	8 0	16 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	9 0	9 0
Darrang . . . . .	...	...	...	...	11 0	10 14	14 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	9 0	9 0
Nowong . . . . .	...	...	...	...	8 0	8 0	15 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	120 0	120 0	8 0	8 0
Subagar . . . . .	...	...	...	...	6 8	6 8	15 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	120 0	120 0	8 0	8 0
Lakhimpur . . . . .	...	...	...	...	6 0	6 0	10 0	11 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	8 0	8 0





RETAIL PRICES FOR THE 2nd HALF OF SEPTEMBER 1990 ~~1989~~

QUANTITIES PER RUPEE IN SER'S OF 50 TOLAS.

[illegible]

Year	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Not sold.

Six pica per bundle.

Ученый секретарь

## RETAIL PRICES FOR THE 2ND HALF OF SEPTEMBER 1889—continued.

## QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU ( <i>Sorghum vulgare</i> ).		BAJRA OR CUMBU ( <i>Pennisetum typhoides</i> ).		MARUA OR SAGI ( <i>Eleusine indica</i> ).		KANGNI OR KARUM, ITALIAN MILLET ( <i>Setaria italica</i> ).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA ( <i>Cicer arietinum</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARHAR, OR TURK, CADIAN PEA ( <i>Cajanus indicus</i> ).		PEANUT.		SALT.			
	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.	Present.	Fortnight.
Punjab—																												
Southern—																												
Hisar	19 0	19 0	36 0	36 0	...	...	8 0	9 0	24 0	24 0	21 0	22 0	...	...	...	...	28 0	27 0	17 0	17 0	...	...	105 0	110 0	10 0	10 0		
Ferozepore	20 0	20 0	36 0	37 0	...	...	9 0	9 0	26 0	26 0	24 0	23 0	...	...	...	...	31 0	31 0	24 0	24 0	...	...	100 0	100 0	13 4	13 4		
Montgomery	18 0	18 0	25 0	28 0	...	...	10 0	10 0	20 0	20 0	15 0	15 0	...	...	...	...	25 0	25 0	20 0	20 0	...	...	200 0	200 0	11 0	11 0		
Central—																												
Gurgaon	18 0	18 0	28 0	28 0	...	...	9 0	9 0	25 0	25 0	23 0	23 0	...	...	...	...	26 0	26 0	24 0	24 0	...	...	130 0	130 0	11 0	11 0		
Delhi	18 0	18 0	23 0	24 0	...	...	10 0	10 0	24 0	24 0	20 0	20 0	...	...	...	...	16 0	16 0	24 0	24 0	...	...	80 0	70 0	11 0	11 0		
Rohat	17 0	18 0	23 0	23 0	...	...	9 0	9 0	25 0	25 0	22 0	22 0	...	...	...	...	15 0	15 0	18 0	18 0	...	...	120 0	120 0	11 0	11 0		
Karnal	18 0	18 0	27 0	27 0	...	...	11 0	9 0	20 0	20 0	16 0	16 0	...	...	...	...	18 0	18 0	25 0	25 0	...	...	120 0	120 0	12 0	12 0		
Lahore	19 0	19 0	34 0	32 0	...	...	9 0	9 0	29 0	29 0	16 0	16 0	...	...	...	...	22 0	22 0	27 0	27 0	...	...	85 0	85 0	12 0	12 0		
Submontane—																												
Amritsar	21 0	20 0	26 0	26 0	...	...	10 0	10 0	20 0	20 0	16 0	16 0	...	...	...	...	10 0	10 0	32 0	32 0	...	...	120 0	120 0	13 0	13 0		
Ludhiana	21 0	23 0	40 0	37 0	...	...	12 0	10 0	30 0	28 0	20 0	20 0	...	...	...	...	20 0	20 0	30 0	30 0	...	...	110 0	110 0	12 8	12 8		
Jullundur	22 0	22 0	32 0	32 0	...	...	8 0	8 0	26 0	26 0	20 0	20 0	...	...	...	...	18 0	18 0	32 0	32 0	...	...	100 0	100 0	13 0	13 0		
Hoshiarpur	22 0	22 0	33 0	33 0	...	...	10 0	10 0	28 0	28 0	20 0	20 0	...	...	...	...	24 0	24 0	30 0	30 0	...	...	100 0	100 0	13 0	13 0		
Gurdaspur	22 0	22 0	28 0	28 0	...	...	12 0	12 0	18 0	18 0	14 0	14 0	...	...	...	...	12 0	12 0	24 0	24 0	...	...	120 0	120 0	13 0	13 0		
Amritsar	22 0	21 0	32 0	31 0	...	...	11 0	10 0	25 0	25 0	16 0	15 0	...	...	...	...	23 0	23 0	24 0	24 0	...	...	90 0	90 0	13 0	13 0		
Hills—																												
Simla	14 0	14 0	20 0	20 0	...	...	8 0	8 0	15 0	15 0	11 0	11 0	...	...	...	...	8 0	8 0	20 0	20 0	...	...	65 0	60 0	8 0	8 0		
Kangra	19 0	19 0	28 0	28 0	...	...	11 0	11 0	14 0	14 0	10 0	10 0	...	...	...	...	8 0	8 0	23 0	23 0	...	...	100 0	100 0	10 0	10 0		
North-western—																												
Sialkote	23 0	22 0	36 0	36 0	...	...	12 0	10 0	28 0	28 0	21 0	20 0	...	...	...	...	20 0	20 0	28 0	28 0	...	...	160 0	160 0	13 0	13 0		
Gujranwala	21 0	21 0	40 0	38 0	...	...	9 0	10 0	26 0	26 0	20 0	20 0	...	...	...	...	20 0	20 0	25 0	25 0	...	...	105 0	105 0	13 0	13 0		
Cherat	23 0	23 0	35 0	34 0	...	...	10 0	10 0	26 0	26 0	24 0	24 0	...	...	...	...	14 0	14 0	24 0	24 0	...	...	120 0	120 0	14 0	14 0		
Faisal	24 0	24 0	35 0	32 0	...	...	11 0	10 0	26 0	26 0	24 0	24 0	...	...	...	...	16 0	16 0	25 0	25 0	...	...	160 0	160 0	14 0	14 0		
Rawalpindi	21 0	21 0	40 0	40 0	...	...	7 0	11 0	40 0	40 0	21 0	21 0	...	...	...	...	16 0	16 0	36 0	36 0	...	...	85 0	80 0	13 4	13 4		
Hazara	22 0	22 0	42 0	41 0	...	...	10 0	10 0	40 0	40 0	14 0	14 0	...	...	...	...	17 0	17 0	34 0	34 0	...	...	100 0	100 0	11 0	11 0		
Peshawar	23 0	22 0	40 0	47 0	...	...	11 0	11 0	46 0	44 0	14 0	14 0	...	...	...	...	18 0	18 0	33 0	33 0	...	...	87 0	100 0	36 0	36 0		
Kohat	23 0	23 0	45 0	44 0	...	...	16 0	17 0	46 0	44 0	14 0	14 0	...	...	...	...	17 0	17 0	34 0	34 0	...	...	100 0	110 0	36 0	36 0		
Western—																												
Shahpur	24 0	24 0	35 0	35 0	...	...	9 0	9 0	24 0	24 0	26 0	26 0	...	...	...	...	30 0	31 0	26 0	26 0	...	...	240 0	240 0	13 0	13 0		
Jhang	22 0	20 0	31 0	31 0	...	...	8 0	8 0	24 0	24 0	18 0	16 0	...	...	...	...	24 0	24 0	20 0	20 0	...	...	200 0	200 0	12 0	12 0		
Nooltan	16 0	16 0	26 0	26 0	...	...	10 0	10 0	26 0	26 0	20 0	20 0	...	...	...	...	22 0	22 0	20 0	20 0	...	...	160 0	160 0	12 0	12 0		
Bannu	28 0	28 0	39 0	40 0	...	...	10 0	10 0	25 0	25 0	31 0	29 0	...	...	...	...	26 0	26 0	32 0	32 0	...	...	60 0	60 0	40 0	40 0		
D. I. Khan	21 0	21 0	34 0	35 0	...	...	7 0	7 0	25 0	25 0	23 0	23 0	...	...	...	...	26 0	26 0	17 0	17 0	...	...	112 0	112 0	43 0	43 0		
Muzaffargarh	28 0	18 0	27 0	27 0	...	...	13 0	13 0	17 0	17 0	17 0	17 0	...	...	...	...	20 0	20 0	15 0	15 0	...	...	125 0	125 0	26 0	26 0		
D. G. Khan	7 0	17 0	24 0	24 0	...	...	8 0	8 0	23 0	23 0	21 0	20 0	...	...	...	...	21 0	21 0	15 0	15 0	...	...	135 0	135 0	26 0	26 0		
Sind and Baluchistan—																												
Karachi	12 0	12 0	18 0	18 0	...	...	11 0	10 0	15 0	15 0	15 0	14 0	...	...	...	...	18 0	18 0	16 0	16 0	...	...	90 0	90 0	14 0	14 0		
Hyderabad (Gidu Bander)	12 8	12 8	15 8	16 0	...	...	9 8	9 8	19 0	19 0	15 0	15 0	...	...	...	...	15 8	15 8	16 0	16 0	...	...	160 0	160 0	12 0	12 0		
Tar and Parkar (Umarkot)	13 8	13 8	...	...	...	...	10 0	10 0	20 0	20 0	19 0	19 0	...	...	...	...	16 0	16 0	17 0	17 0	...	...	80 0	80 0	12 8	12 8		
Sukkur	14 0	14 0	21 0	21 0	...	...	9 0	9 0	18 0	18 0	23 0	23 0	...	...	...	...	19 0	19 0	17 0	17 0	...	...	125 0	125 0	11 4	11 4		
Shikarpur	12 4	12 10	18 8	18 8	...	...	9 8	9 8	20 0	20 0	20 0	19 4	...	...	...	...	19 0	19 0	17 0	17 0	...	...	160 0	160 0	11 0	11 0		
Upper Sind Frontier	13 0	13 0	19 0	19 0	...	...	9 0	9 0	23 0	23 0	20 0	19 0	...	...	...	...	19 0	19 0	17 0	17 0	...	...	160 0	160 0	11 0	11 0		



RETAIL PRICES FOR THE 2nd HALF OF SEPTEMBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMRU (Pennisetum hybrioides).		MARUA OR RAGI (Eleusine indica).		KANDU OR KANUM, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arisatum).		MAIZE (Zea Mays).		ARAR, OR THEE, CADJAN, P.A. (Coix indica).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Madras—																										
Malabar Coast—																										
Malabar . . . . .	8 6	8 10	...	...	11 3	11 13	12 3	12 10	...	...	...	...	20 4	20 6	...	...	...	...	...	...	...	136 1	136 2	11 7	11 11	12 5
S. Canara . . . . .	8 1	8 2	...	...	9 9	10 10	10 8	11 5	...	...	...	...	19 3	19 5	...	...	...	...	...	...	...	128 8	128 13	12 3	12 5	12 5
South, central—																										
Coimbatore . . . . .	11 1	11 2	...	...	12 2	12 3	13 1	13 3	21 6	21 10	23 9	23 14	26 2	26 3	...	...	...	...	...	...	...	133 6	133 10	11 7	12 11	13 8
Nilgiris . . . . .	10 7	10 11	...	...	9 10	10 4	10 6	11 5	20 0	20 10	16 8	16 13	30 2	30 3	...	...	...	...	...	...	...	161 8	161 13	10 1	10 9	11 3
Salem . . . . .	10 8	10 13	...	...	11 8	11 13	12 2	13 3	28 8	29 2	26 2	26 3	31 3	30 13	...	...	...	...	...	...	...	186 6	186 10	13 5	13 8	13 8
Central—																										
Bellary . . . . .	13 4	13 6	...	...	11 2	11 13	13 0	13 8	28 8	28 10	21 6	21 10	32 0	33 0	...	...	...	...	...	...	...	97 2	97 3	11 9	11 14	11 14
Anantapur . . . . .	11 5	11 8	...	...	12 8	12 13	14 0	14 0	30 0	30 1	35 4	35 6	32 5	32 8	...	...	...	...	...	...	...	194 4	194 6	11 3	11 5	11 5
Cuddapah . . . . .	12 5	12 8	...	...	11 6	11 10	12 8	12 8	22 9	23 11	22 5	22 8	31 5	31 8	...	...	...	...	...	...	...	140 0	140 0	12 1	12 3	12 3
Kurnool . . . . .	10 8	11 6	...	...	10 7	10 11	11 4	11 6	25 3	25 11	22 5	22 8	25 8	25 8	...	...	...	...	...	...	...	142 9	142 14	11 7	11 5	11 5
East Coast, north—																										
Guntur . . . . .	8 0	7 2	...	...	10 0	10 8	11 0	10 0	...	...	...	...	18 2	17 5	...	...	...	...	...	...	...	127 3	127 11	12 8	12 13	12 13
Vizapatnam . . . . .	10 2	10 13	...	...	9 5	9 10	10 7	10 11	26 5	26 11	29 7	27 11	24 2	20 3	...	...	...	...	...	...	...	166 6	166 10	11 7	11 11	11 11
Godavari . . . . .	8 1	10 0	...	...	14 4	13 14	15 0	15 0	26 9	23 0	29 9	31 2	25 5	31 13	...	...	...	...	...	...	...	243 0	243 0	12 0	12 0	12 0
East Coast, central—																										
Kianna . . . . .	13 7	11 8	...	...	13 7	13 5	14 8	14 5	19 0	19 0	...	...	23 8	23 13	...	...	...	...	...	...	...	170 1	170 8	13 2	13 3	13 3
Nellore . . . . .	10 4	10 6	...	...	13 8	13 5	14 8	14 5	23 7	22 11	...	...	28 8	27 13	...	...	...	...	...	...	...	93 3	93 5	12 8	12 13	12 13
East Coast, south—																										
Madras . . . . .	10 8	10 13	...	...	11 6	11 11	12 7	12 14	17 5	18 11	4 0	7 2	26 0	26 0	...	...	...	...	...	...	...	94 3	90 6	12 1	12 5	12 5
Chingelput . . . . .	9 7	9 6	...	...	12 0	12 11	12 8	13 10	...	...	17 2	17 2	24 7	24 11	...	...	...	...	...	...	...	122 5	122 8	12 4	12 5	12 5
N. Arcot . . . . .	8 6	8 10	...	...	13 1	13 2	14 0	13 10	...	...	24 8	24 13	35 4	30 13	...	...	...	...	...	...	...	194 4	194 6	11 3	11 5	11 5
S. Arcot . . . . .	8 8	8 10	...	...	13 2	13 2	14 0	13 10	...	...	23 1	24 10	29 5	23 14	...	...	...	...	...	...	...	209 0	209 0	11 7	11 11	11 11
Tanjore . . . . .	8 8	8 13	...	...	13 2	13 11	14 0	13 10	20 7	20 11	30 5	30 8	29 5	29 8	...	...	...	...	...	...	...	166 2	166 3	12 4	12 6	12 6
Tuticorin . . . . .	8 9	8 14	...	...	13 2	13 10	14 7	13 1	22 4	22 6	26 7	22 14	27 5	27 8	...	...	...	...	...	...	...	143 4	143 6	12 1	12 3	12 3
Southern—																										
Tinnevely . . . . .	8 5	8 8	...	...	11 1	11 2	12 8	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	53 3	53 5	14 8	14 13	14 13
Madura . . . . .	9 7	9 11	...	...	11 8	12 3	12 5	12 11	25 9	24 5	20 6	20 10	26 4	24 13	...	...	...	...	...	...	...	136 1	136 2	13 6	13 10	13 10
Mysore—																										
Mysoor . . . . .	10 0	10 0	10 8	10 4	9 8	9 8	10 8	10 8	35 0	38 0	17 8	18 0	38 0	30 0	...	...	...	...	...	...	...	84 0	87 0	9 0	8 12	8 12
Bangalore . . . . .	10 8	10 8	11 0	11 8	10 8	10 8	11 8	12 8	23 0	23 0	...	...	32 0	32 0	...	...	...	...	...	...	...	84 0	84 0	9 0	9 4	9 4
Kolar . . . . .	...	...	11 0	11 0	10 8	10 8	12 0	12 8	...	...	...	...	42 0	42 0	...	...	...	...	...	...	...	144 0	144 0	9 0	9 8	9 8
Tumkur . . . . .	...	...	11 0	11 0	10 8	10 8	12 0	12 8	...	...	...	...	48 0	48 0	...	...	...	...	...	...	...	340 0	340 0	9 0	9 0	9 0
Hassan . . . . .	...	...	10 0	9 0	10 8	10 8	12 0	12 0	...	...	...	...	48 0	48 0	...	...	...	...	...	...	...	340 0	340 0	9 0	9 0	9 0
Kadur . . . . .	10 0	10 0	11 0	11 0	10 8	10 8	12 0	12 0	...	...	...	...	48 0	48 0	...	...	...	...	...	...	...	340 0	340 0	9 0	9 0	9 0
Shimoga . . . . .	21 9	21 9	22 10	22 10	21 9	21 9	22 10	22 10	33 10	33 10	...	...	44 1	44 2	...	...	...	...	...	...	...	240 0	240 0	8 0	8 0	8 0
Chitaldrug . . . . .	23 0	23 0	23 0	23 0	23 0	23 0	23 0	23 0	34 0	34 0	32 0	32 0	48 0	48 0	...	...	...	...	...	...	...	480 0	480 0	8 0	8 0	8 0
Coorg—																										
Coorg . . . . .	9 0	9 0	8 0	8 0	10 8	11 8	12 8	13 8	...	...	...	...	28 8	30 0	...	...	...	...	...	...	...	110 0	110 0	8 5	9 0	9 0
Aden . . . . .	8 0	8 0	...	...	6 3	6 3	8 0	8 0	10 3	10 3	9 4	9 4	...	...	...	...	...	...	...	...	...	65 5	65 5	32 0	32 0	32 0

• Not sold.

DEPARTMENT OF FINANCE AND COMMERCE,  
(Statistical Branch).

E. J. SINKINSON,  
Secretary to the Government of India.

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SUPPLEMENT TO  
**The Gazette of India.**

No. 46.} CALCUTTA, SATURDAY, NOVEMBER 16, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Decrees of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, November 4th, 1889.**

It will be remembered that during the previous week a well-defined and not inconsiderable storm had formed over the Bay and that rainy, unsettled, weather had prevailed around the head of the Bay and over a large part of Bengal. With the disappearance of this depression, which took place at the close of the preceding week, there occurred a sudden and extensive extension of the fine weather which had previously prevailed over North-Western and Central India, and which during the present week has spread to almost all parts of the Indian region. As was the case last week the rain-bearing north-easterly current, which usually prevails in the Madras Presidency at this season, has again been absent. Its absence last week was satisfactorily explained by the presence of the depression over the Bay, into which the moist southerly winds, which cross the Equator, fell instead of recurving over the centre of the Bay and blowing on to the Coromandel Coast. During the present week, though the observations have given evidence of the presence of a slight low pressure area near the Burmese coast and over the Andaman sea, there has been no evidence of any such depression as that which interrupted the current last week, so that perhaps the reason of the absence of rain in the Madras Presidency may be the absolute weakness of the southerly winds crossing the Equator. Whatever may be the solution of the question it is undoubted that the deficiency is becoming serious.

The chart of the 29th showed a large area of uniform and relatively high readings overlying the greater part of the country with slightly lower readings along the foot of the hills and over the Bay of Bengal. The range of pressure throughout the Indian region was only one-eighth of an inch and accompanying this uniformity of pressure were light and rather variable winds. On the whole, however, except on the east coast of the Peninsula, the directions were fairly normal. On the 30th the distribution was approximately the same, but the range was smaller. Hence the winds were even lighter than on the preceding day. The chart of the 31st showed that the barometer had fallen both in the west and north of the Punjab and in Burma, so that while a slight high pressure area prevailed over the central parts of India and of the Peninsula, low pressures were reported from the Punjab and a distinct depression from Burma. Winds were cyclonic in Burma and abnormally westerly on the east coast of the Peninsula, while elsewhere they were fairly normal in direction. On the morning



of the 1st the chart showed that the depression over Burma had intensified and increased somewhat, and that the barometer was still falling there. The barometer was also falling over the Peninsula, and relatively low pressures were reported from both coasts. In Northern India, on the contrary, the barometer had risen, and the range of pressure was greater than on previous days. Northerly winds prevailed over Burma, and light variable winds and calms in Upper India; elsewhere the directions were unchanged. On the 2nd the barometer was still falling in Burma and over the Indian Peninsula, while it had risen briskly in Northern India. A large high pressure area lay over the whole of North-Western and Central India, and the difference between the reading at Hoshangabad and that at Diamond Island was 0.2". Light variable airs or calms prevailed within the high pressure area noticed above, while elsewhere the directions were generally between north-west and north-east. The chart of the 3rd showed that the barometer had continued to rise in North-Western India while it had fallen or remained almost steady elsewhere. In consequence the high pressure area in the north-west had become much more strongly defined, and the pressure difference between Sind and Lower Burma amounted to 0.25". The winds showed very little change and the circulation over the greater part of the country was almost normal, though on the east coast of the Peninsula there was much more westing than usual. On the 4th, owing to a slight to moderate barometric rise in all parts of the Indian region except the north-west, pressure became much more uniform again, and the winds on the west side of the Bay showed a tendency to shift towards the normal north to north-east direction.

*Temperature.*—The remarkable depression of temperature, which has prevailed over India for several weeks, has continued during the week under review, but the lowest point of the oscillation was reached last week, and the present deficiencies are less than those previously reported. In some cases, indeed, a slight excess has replaced a deficiency. As the general depression of temperature disappeared, the remarkable relation between the minimum temperatures on the hills and neighbouring plains also disappeared, so that during the greater part of the past week the minima on the hills have been the lowest recorded.

The following table shows the variations of the mean temperature of the present and of the past week from the normal average:—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
Burma	—0.6	—0.7
Bengal	+1.6	—0.5
North-Western Provinces	—1.1	+0.8
Punjab	—3.1	+1.3
Bombay	—4.3	—2.5
Central Provinces	—4.3	—2.6
Guzerat and Central India	—5.4	—1.5
Sind and Rajputana	—5.1	—0.7
Madras	—1.1	+0.2

*Rain.*—The rainfall of the past week has been exceedingly small. Over a very large part of India no rain whatever has fallen, and only in Burma has there been any general rain or any excess over the normal average.

The daily distribution of rainfall was briefly as follows:—On the 29th showers fell in Assam, on the Arrakan coast and at Rangoon, but in no other part of the Indian region. On the 30th scattered showers were again the only rainfalls recorded, and occurred in the Upper Assam Valley and at Rajahmundry and Nellore. On the 31st rain was reported from Moulmein, Thyetmyo, and Madras, the amounts in all cases being less than one-tenth of an inch. On the 1st there was moderate general rain in Burma, and showers at Nellore, Wellington, and Trevandrum. On the 2nd the distribution was the same. On the 3rd rain ceased in Burma, except at Diamond Island, but fell fairly generally in the south of the Peninsula, while a slight local fall was reported from Murree. On the 4th the record was the same except that there was no rain at Murree.

The table at the close of the summary shows that the past week has been one of exceptionally light rainfall. In normal years eight of the rainfall divisions are ordinarily rainless at this time, but during the past week no less than thirty-four divisions report no rain whatever, while six report amounts of less than  $\frac{1}{10}$  of an

**SUPPLEMENT TO THE GAZETTE OF INDIA, NOVEMBER 16, 1889. 1291**

inch. The only divisions where there has been any excess are the Burmese, where the normal average has been largely exceeded. The Madras divisions show large deficiencies and the seasonal rainfall in that part of the country is considerably behind the normal.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING 4TH NOVEMBER 1889.			RAINFALL DATA FROM OCTOBER 15TH TO 4TH NOVEMBER 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, October 15th to 4th November.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . . .	1'12	0'15	+0'97	14'75	3'84	+284
	Lower Burma . . . . .	1'06	0'20	+0'86	4'88	3'08	+58
	Central do. . . . .	1'48	0'15	+1'33	4'91	2'59	+90
	Upper do. . . . .	0'54	?	?	2'32	?	?
	Arakan . . . . .	0'52	0	+0'52	5'41	2'80	+93
BENGAL AND ASSAM.	Eastern Bengal . . . . .	0	0'12	-0'12	4'26	2'81	+52
	Assam (Surma) . . . . .	0'12	0'73	-0'61	2'47	2'89	-15
	Do. (Brahmaputra) . . . . .	0'18	0'20	-0'02	0'92	1'73	-47
	Deltaic Bengal . . . . .	0	0'43	-0'43	4'79	2'61	+81
	Central do. . . . .	0'02	0'27	-0'25	0'80	2'17	-63
	North do. . . . .	0	0'41	-0'41	0'26	2'31	-89
	Orissa . . . . .	0	1'03	-1'03	5'45	4'00	+36
	Chutia Nagpur . . . . .	0	0'28	-0'28	0'77	1'46	-47
	Behar (South) . . . . .	0	0'26	-0'26	0'36	1'31	-73
	Do. (North) . . . . .	0	0'26	-0'26	0	1'21	-100
NORTH-WESTERN PROVINCES AND ODH.	North-Western Provinces (East) . . . . .	0	0'13	-0'13	0'75	0'75	0
	Oudh (South) . . . . .	0	0	0	0'05	0'33	-85
	Do. (North) . . . . .	0	0	0	0	0'11	-100
	North-Western Provinces (Central) . . . . .	0	0'07	-0'07	0	0'35	-100
	North-Western Provinces (West) . . . . .	0	0	0	0	0'03	-100
	North-Western Provinces (Submontane) . . . . .	0	0'02	-0'02	0'03	0'23	-87
PUNJAB.	Punjab (South) . . . . .	0	0	0	0	0'08	-100
	Do. (Central) . . . . .	0	0	0	0	0'16	-100
	Do. (Submontane) . . . . .	0	0	0	0	0'01	-100
	Do. (Hill Districts) . . . . .	0	0'06	-0'06	0	0'25	-100
	Do. (North-west) . . . . .	0'01	0'04	-0'03	0'01	0'24	-96
	Do. (West) . . . . .	0	0	0	0	0'03	-100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar . . . . .	0'40	2'53	-2'13	8'18	6'07	+33
	Madras (South Central) . . . . .	0'55	1'32	-0'78	3'60	5'40	-33
	Coorg . . . . .	0'06	1'93	-1'87	10'96	5'47	+100
	Mysore . . . . .	0'05	0'70	-0'65	2'10	3'00	-30
	Konkan . . . . .	0	0'43	-0'43	4'84	1'51	+221
	Bombay Deccan . . . . .	0	0'48	-0'48	4'96	2'43	+104
	Hyderabad (North) . . . . .	...	...	...	...	...	...
	Khandeish . . . . .	0	0'03	-0'03	1'26	2'00	-37
CENTRAL PROVIN- CES AND BERRAR.	Berrar . . . . .	0	0'13	-0'13	3'14	1'59	+97
	Central Provinces (West) . . . . .	0	0'05	-0'05	2'95	0'77	+283
	Do. (Central) . . . . .	0	0'09	-0'09	1'72	0'62	+177
	Do. (East) . . . . .	0	0'37	-0'37	1'35	0'80	+69
BOMBAY (NORTH)	Guzerat . . . . .	0	0'04	-0'04	0'03	0'35	-91
	Kattiawar . . . . .	0	0'07	-0'07	0	0'13	-100
	Sind . . . . .	0	0'01	-0'01	0	0'03	-100
RAJPUTANA AND CENTRAL INDIA.	Central India (East) . . . . .	0	0'01	-0'01	0'13	0'43	-70
	Rajputana (East), Central India (West) . . . . .	0	0'02	-0'02	0	0'24	-100
	Rajputana (West) . . . . .	0	0'01	-0'01	0	0'08	-100
	East Coast (North) . . . . .	0'05	0'72	-0'67	6'54	5'16	+27
MADRAS.	Do. (North)(a) . . . . .	0	?	?	6'25	?	?
	Hyderabad (South) . . . . .	0	0'22	-0'22	1'98	1'80	+32
	Madras (Central) . . . . .	0	0'53	-0'53	3'78	2'71	+39
	East Coast (Central) . . . . .	0'16	1'82	-1'66	7'60	6'53	+16
	Do. (South) . . . . .	0'09	2'48	-2'39	2'59	6'12	-58
	Madras (South) . . . . .	0'75	2'40	-1'65	1'34	5'89	-77

W. L. DALLAS,

Calcutta, 11th November, 1889.

*Assistant Meteorological Reporter to the  
Government of India.*

J. W. P. MUIR-MACKENZIE,

*Offg. Secretary to the Government of India.*

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 9th November.*—No rain in Vizagapatam, Bellary, Anantapur, Kurnool, North Arcot and Salem; moderate in Madura and Tinnevely, and very slight elsewhere. Standing crops generally good, but withering from want of rain in Chingleput, North Arcot and South Arcot. Rain urgently wanted in these districts, and in Madura, Tinnevely, Trichinopoly, Coimbatore, Salem and parts of Tanjore. Crops damaged by locusts in Kistna, and by previous excessive rains in parts of Bellary. Paddy and cholam blighted in parts of Cuddapah, and paddy in South Arcot. Prices generally falling or stationary, but all risen in town of Madras owing to failure of monsoon up to date. Labourers employed on last day of week on Rushikulya works, 5,387; Gopalpore Canal, 1,391; Ghat Roads, 1,543; other minor relief works, 1,094; State relief closed. General prospects fair.

**Bombay.**—*For week ending 13th November.*—Standing crops slightly injured by locusts in parts of Sind and Guzerat, otherwise generally healthy. Cotton prospects in Guzerat and Kathiawar good. Harvesting and sowing operations progressing. Agricultural stock generally good.

**Bengal.**—*For week ending 12th November.*—No rain during the week except light showers at Narail and Jessore on the 5th and 6th instant. Agricultural prospects continue generally favourable. *Aman* or winter rice is maturing, and harvesting has begun on high lands. *Rabi* or cold-weather sowings are coming up well. Prospects of poppy cultivation are good, except in the Hajipore Sub-division of Mozufferpore, where the sowings are backward for want of moisture. *Ganja* cultivation in the Rajshahye District is well forward. Sugarcane is generally a good crop. Cotton is being gathered in the hill tracts of Chittagong and Tipperah, and is a fair crop. Rice is cheaper than at this time last year in most districts of Behar, but in the rest of the province the rates continue high and almost steady in spite of the good prospects of the coming harvest. In Balasore, Durbhunga and Chumparun rice is selling at comparatively low rates, the quotations for the 31st October being 21 seers, 19 seers and 18 seers per rupee, respectively. Distress in the Patna Division was reported last week to be practically at an end, and no further report has been received this week.

**North-Western Provinces and Oudh.**—*For week ending 13th November.*—The weather continues seasonable, and agricultural operations are everywhere being actively conducted. A flight of locusts passed over the Banda and Jhansi districts on the 8th and is said to have done some injury to the crops in the latter district. Supplies are ample and prices easy.

**Punjab.**—*For week ending 13th November.*—Slight rain at Peshawar. Prices unsettled in Delhi, rising in Amballa and Rawalpindi, stationary elsewhere. Harvesting still in progress. Sowing of *rabi* still proceeding on. Rain much needed throughout the province for the completion of *rabi* sowings. The *kharif* crop is expected to prove an average one. Fodder sufficient and ample throughout the province.

**Central Provinces.**—*For week ending 13th November.*—Weather clear and cold. Harvesting of *kharif* crops in progress; outturn good. Wheat and other young *rabi* crops in good condition. Cotton-picking continues; outturn full average. Prices steady.

**Burma.**—*For week ending 9th November.*—In all districts in Lower Burma, with the exception of the northern circles in Tharrawaddy and in parts of the Prome district, the rainfall has been about normal. In Upper Burma more is

wanted in Meiktila and Yamethin and in parts of Minbu. The crop prospect is good throughout Lower Burma. In Upper Burma, on the whole, the crop prospect is good. In Lower Burma a fall in the price of paddy is shown in the Akyab, Prome and Moulmein districts, and there is a slight rise noticeable in Henzada and Mergui; in the other districts, there are no fluctuations. In Upper Burma there is a fall in the price of paddy in Shwebo, the Lower Chindwin and Mergui, elsewhere prices remain stationary. The food-supply is sufficient throughout the province.

**Assam.**—*For week ending 13th November.*—Slight rain in the Garo Hills. Sowing of mustard in progress. Cold weather paddy promising. Prospects of tea and other crops good.

**Mysore and Coorg.**—*For week ending 13th November.*—Standing crops in good condition except in parts of the Bangalore and Kolar districts, where lately sown crops need more rain. Harvesting continues and outturn fair. Prospects generally favourable. Prices slightly risen in the Bangalore district. No rain in Coorg. Season favourable for standing crops.

**Berar and Hyderabad.**—*For week ending 13th November.*—In Berar the weather is cool. *Jowari* and *tur* in good condition. Picking of cotton continues. *Rabi* sowing completed. Prices declining. Fodder sufficient except in Chikli. No rain at Hyderabad during week. Harvesting of *kharif* crops concluded. Sowing of *rabi* continues. *Abi* crops thriving. Prices stationary.

**Central India.**—*For week ending 13th November.*—No material changes in weather and condition of crops in Central India since last report.

**Rajputana.**—*For week ending 13th November.*—Agricultural operations satisfactory. Crops damaged by locusts in Bundi and parts of Bhurtpore. Agricultural stock good. Fodder dear in Marwar and failing in Dholepore. Prices rising in Alwar, steady elsewhere.

**Nepal.**—*For week ending 7th November.*—No rain. Weather clear and cold. Paddy harvesting completed.

J. W. P. MUIR-MACKENZIE,  
for Secretary to the Government of India.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

ABSTRACT SHOWING THE RESULT OF EMIGRATION FROM THE PORT OF CALCUTTA DURING THE  
MONTH OF SEPTEMBER, 1889.

*No. 1.—As to Age and Sex.*

	DEMOKARA.				TRINIDAD.				Fiji.				MAURITIUS.				NATAL.				SURINAM.				TOTAL.		GRAND TOTAL.
	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	
Under 2 years	2	3	5	31.87	18	20	38	44.38	...	...	...	...	9	17	26	35.38	...	...	...	...	...	...	...	...	29	40	69
From 2 to 16 years.	15	17	33	31.87	30	19	49	44.38	...	...	...	...	44	33	77	35.38	...	...	...	...	...	...	...	...	90	69	159
„ 10 „ 20 „	88	25	113	31.87	22	10	32	44.38	...	...	...	...	49	19	68	35.38	...	...	...	...	...	...	...	...	159	54	213
„ 20 „ 30 „	586	190	776	31.87	206	111	317	44.38	...	...	...	...	254	88	342	35.38	...	...	...	...	...	...	...	...	1,046	389	1,435
„ 30 „ 40 „	102	33	135	31.87	78	16	94	44.38	...	...	...	...	67	29	96	35.38	...	...	...	...	...	...	...	...	947	78	1,025
„ 40 „ 50 „	2	...	2	31.87	2	...	2	44.38	...	...	...	...	9	...	9	35.38	...	...	...	...	...	...	...	...	14	...	14
Above 50 „	...	...	...	31.87	...	...	...	44.38	...	...	...	...	...	...	...	35.38	...	...	...	...	...	...	...	...	...	...	...
GRAND TOTAL	796	268	1,064	31.87	357	176	533	44.38	...	...	...	...	432	186	618	35.38	...	...	...	...	...	...	...	...	1,585	630	2,215

*No. 2.—As to places whence Emigrants came to Calcutta for Embarkation.*

Orissa	2	...	2	...	3	3	6	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	5	4	9
Western Bengal	3	4	7	...	7	3	10	...	...	...	...	...	11	8	19	...	...	...	...	...	...	...	...	...	21	9	30
Central „	4	2	6	...	6	5	11	...	...	...	...	...	7	1	8	...	...	...	...	...	...	...	...	...	17	8	25
Eastern „	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Behar	130	69	205	...	113	42	155	...	...	...	...	...	218	101	319	...	...	...	...	...	...	...	...	...	467	212	679
North-Western Provinces	409	133	542	...	152	97	249	...	...	...	...	...	154	65	219	...	...	...	...	...	...	...	...	...	715	295	1,010
Quah	229	49	278	...	67	23	90	...	...	...	...	...	35	15	54	...	...	...	...	...	...	...	...	...	335	87	422
Central India	2	5	7	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	6
Punjab	3	2	5	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7
Nepal and Native States	6	1	7	...	...	...	...	...	...	...	...	...	3	1	4	...	...	...	...	...	...	...	...	...	9	2	11
Mixed, Bombay & Madras	2	3	5	...	6	3	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	6	14
GRAND TOTAL	796	268	1,064	...	357	176	533	...	...	...	...	...	432	186	618	...	...	...	...	...	...	...	...	...	1,585	630	2,215

*No. 3.—As to Caste and Religion.*

Brahmins and high castes.	150	48	198	...	43	25	68	...	...	...	...	...	59	17	76	...	...	...	...	...	...	...	...	...	252	90	342
Agriculturists	234	65	299	...	116	36	152	...	...	...	...	...	156	39	195	...	...	...	...	...	...	...	...	...	506	131	637
Artisans	74	21	95	...	30	9	39	...	...	...	...	...	29	15	44	...	...	...	...	...	...	...	...	...	133	45	178
Low castes	227	81	308	...	121	72	193	...	...	...	...	...	146	108	254	...	...	...	...	...	...	...	...	...	494	261	755
Musulmans	110	33	143	...	47	34	81	...	...	...	...	...	44	16	60	...	...	...	...	...	...	...	...	...	199	103	302
Christians	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
GRAND TOTAL	796	268	1,064	...	357	176	533	...	...	...	...	...	432	186	618	...	...	...	...	...	...	...	...	...	1,585	630	2,215

MEMORANDUM.		Male.	Female.	TOTAL.
1. Hindus	...	1,385	527	1,912
2. Musulmans	...	199	103	302
3. Christians	...	1	...	1
Total	...	1,585	630	2,215

J. MUIR-MACKENZIE,  
Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXIX OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 20TH OCTOBER 1888.			WEEK ENDING 19TH OCTOBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 20TH OCTOBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 19TH OCTOBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.
		Total length open.	RECEIPTS.		Total length open.	RECEIPTS.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
	<i>State Lines worked by Companies</i>		R	R		R	R	R	R	R	R		
26th Oct., 1889	East Indian	1,514	6,58,641	435	1,526	(a) 8,76,507	574	2,29,60,689	523	(a) 2,32,94,352	527	1,33,563	
26th ditto	Patna-Gya	57	7,517	132	57	9,151	161	2,77,227	107	2,56,327	155	...	20,895
...	Dildarnagar-Ghazi- pur	12	609	51	...	(b) ...	...	38,147	110	(b) ...	...	...	38,147
...	Sindia	75	6,046	81	...	(c) ...	...	1,96,578	90	(c) ...	...	...	1,96,578
26th Oct., 1889	Rajputana-Malwa	1,664	3,92,064	236	1,672	3,23,000	193	98,35,876	204	1,04,04,600	216	5,68,724	...
26th ditto	Bengal-Nagpur (d)	183	18,207	99	305	(e) 29,074	95	8,02,170	149	(e) 9,59,880	110	1,57,710	...
26th ditto	Southern Mahratta (f)	854	77,056	90	978	58,421	60	21,44,801	87	22,37,765	89	92,964	...
26th ditto	Ditto Mysore Sec- tion	140	21,303	152	206	24,890	84	3,30,278	81	4,92,042	69	1,61,764	...
26th ditto	Indian Midland	126	8,463	62	746	(g) 63,465	84	3,74,795	95	(g) 15,28,526	79	11,53,728	...
26th ditto	Villupuram-Dharma- varam, Nellore Branch	83	5,141	69	83	3,915	47	1,40,154	38	1,30,690	58	...	464
26th ditto	Bareilly-Pilibhit	36	1,779	49	36	2,503	70	42,428	43	53,886	53	11,458	...
	TOTAL	4,754	11,98,328	252	5,699	13,90,033	244	3,71,43,141	263	3,93,06,908	250	22,23,827	...
	<i>State Lines worked by Government.</i>												
26th Oct., 1889	North-Western (h)	2,459	5,02,436	203	2,478	6,44,929	260	1,36,85,007	191	1,50,23,833	210	13,38,826	...
26th ditto	Oudh and Rohilkhand	692	1,19,317	172	692	1,28,836	186	36,89,276	184	41,16,979	205	4,27,703	...
26th ditto	Bengal Central	125	13,770	110	125	11,530	92	4,00,810	111	4,21,525	110	20,715	...
26th ditto	Waruna Coal	45	11,860	264	45	18,101	402	4,05,903	311	4,24,180	327	18,217	...
26th ditto	Eastern Bengal	673	2,63,276	391	747	2,48,690	333	56,02,203	287	57,64,913	279	1,62,709	...
26th ditto	Nalhati	27	2,083	77	27	1,669	82	55,848	71	53,993	60	...	2,755
26th ditto	Tinoot	273	27,262	100	273	31,389	113	8,83,659	121	10,12,309	132	1,28,650	...
26th ditto	Lucknow-Sitapur-Sil- khamau	105	4,382	42	105	5,038	48	1,37,881	45	1,74,516	57	36,635	...
26th ditto	Jorhat	25	1,243	50	25	955	38	34,721	48	35,342	49	621	...
26th ditto	Cherra-Companyganj.	7	311	44	7	176	25	3,726	18	4,743	23	1,017	...
26th ditto	Burma (i)	392	52,230	133	553	89,250	161	15,80,111	147	24,19,114	157	8,39,003	...
	TOTAL	4,833	9,98,170	207	5,077	11,80,563	233	2,64,79,205	190	2,94,50,546	202	29,71,341	...
	<i>Lines worked by Guar- anteed Companies</i>												
26th Oct., 1889	Madras	840	1,62,420	193	840	1,47,396	175	47,00,061	193	51,61,450	213	4,61,389	...
26th ditto	South Indian	654	1,01,325	155	654	1,08,503	166	3,21,884	165	32,67,410	173	1,40,526	...
26th ditto	Great Indian Peninsula	1,504	(j) 6,27,131	417	1,440	(k) 5,25,908	365	(l) 2,25,17,571	518	(k) 1,72,20,070	414	...	54,97,501
26th ditto	Bombay, Baroda and Central India (l)	461	2,21,620	481	461	2,03,000	440	57,06,345	502	58,97,163	518	1,90,818	...
	TOTAL	3,459	11,12,566	322	3,395	9,84,707	290	3,70,45,801	369	3,25,41,093	332	...	45,04,768
GRAND TOTAL (GUARANTEED AND STATE)		13,046	33,09,064	254	14,171	35,55,302	251	10,06,63,207	267	10,13,58,607	253	6,90,400	...
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	5,26,03,048	130	5,29,94,020	132	3,85,972	...
NET RECEIPTS		...	...	...	...	...	...	4,80,60,159	128	4,83,64,587	121	3,04,428	...
	<i>Assisted Companies</i>												
26th Oct., 1889	Tarakeshwar	22	5,642	256	22	4,431	201	1,54,151	242	1,56,906	247	2,755	...
26th ditto	Dibru-Sadiya	78	7,889	101	78	9,293	119	2,50,568	111	2,71,131	120	20,553	...
26th ditto	Bengal and North- Western	376	30,078	80	376	27,860	74	12,84,472	119	13,29,091	122	44,679	...
26th ditto	Rohilkhand-Kumaon	67	9,789	146	67	8,048	120	3,02,114	108	2,15,596	115	13,482	...
	TOTAL	543	53,398	98	543	49,632	91	18,91,245	120	19,72,714	126	81,469	...
	<i>Native States.</i>												
26th Oct., 1889	His Highness the Nizam's Guaranteed	310	33,184	107	354	43,327	120	9,01,346	107	12,40,553	121	3,39,207	...
26th ditto	His Highness the Gaekwar's	59	2,437	41	59	2,120	36	72,140	42	73,532	43	1,392	...
26th ditto	His Highness the Gaekwar's Viramgam	...	...	...	...	700	26	25,351	42	29,655	38	4,304	...
26th ditto	Mehsana-Vadnagar	21	644	31	27	...	...	...	...	...	...	...	...
26th ditto	Bhavanagar-Gondal- Junagarh-Porbandar	209	15,731	25	320	21,844	66	5,54,448	97	7,69,433	93	1,64,985	...
26th ditto	Morvi	68	2,362	35	68	2,434	36	27,984	50	1,08,673	55	10,689	...
26th ditto	Jodhpore	124	6,877	55	124	7,300	59	1,95,491	54	1,88,225	53	...	7,266
	TOTAL	791	61,235	77	961	76,725	80	18,46,760	54	23,60,071	91	5,13,311	...

- (a) Includes the Dildarnagar-Ghazi-pur State Railway.  
(b) Included with East Indian Railway.  
(c) Included with Indian Midland Railway.  
(d) Includes the Katni-Umari Branch.  
(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.  
(f) Includes the Bellary-Kistna State Railway.  
(g) Includes the Sindia and Bhopal-Irtai State Railways.

- (h) Includes the Amritsar-Patankot and Rajpura-Bhatinda State Railways.  
(i) Includes the Toungoo-Mandalay extension.  
(j) Includes the Dhond-Mannad, Khangan, Amraoti and Bhopal-Irtai State Railways.  
(k) Includes the Dhond-Mannad, Khangan and Amraoti State Railways.  
(l) Includes the Patri Branch.

M. C. BRACKENBURY, Major, R.E.,  
Under-Secretary.

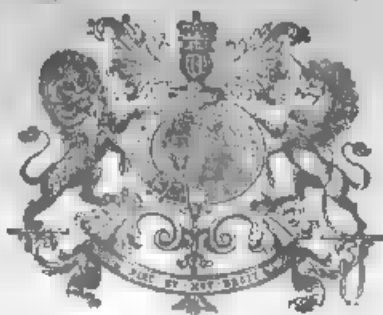
CALCUTTA,  
The 14th November, 1889.

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SUPPLEMENT TO  
**The Gazette of India.**

No. 47.} CALCUTTA, SATURDAY, NOVEMBER 23, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem so or of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending 8 a.m. on  
Monday, November 11th, 1889.**

The fine settled weather which characterised last week has continued during the week under review. An abnormally small amount of rain has fallen, and the barometric conditions and winds have maintained a steadiness which is unusual even at this season of the year. Northerly and north-westerly winds have prevailed over the Madras Presidency, instead of the northerly to north-easterly winds, which are ordinarily characteristic of this season in this region. The difference in the place of origin of these two currents accounts for the difference in the weather of the present season from that ordinarily experienced.

On the 5th a high pressure area extended in a south-easterly direction from the Indus Valley as far as Berar, while the area of lowest pressure overlay the Andaman sea and the south-east of the Bay. The weather over the greater part of India was under the influence of the anticyclonic area, and was very fine with north-westerly and westerly winds down the Gangetic plain, north-easterly winds over the Central Provinces, and easterly winds over the west coast of the Peninsula. Over and around the Bay, on the contrary, the weather was feebly cyclonic, so that easterly winds prevailed in Burma and northerly to north north-westerly winds on the west side of the Bay with a somewhat cloudy sky and unsettled conditions. On the 6th there was no practical change, except that both the high pressure and low pressure areas had contracted, and the barometric difference over the Indian region became very slight. The winds and weather were the same as on the preceding day, only the cloud was rather less over the Bay area. On the 7th the chart showed that the barometer was falling briskly in the north-west and the high pressure area had moved southward. At the same time a small and shallow depression had appeared over Burma, and the barometric differences were

a trifle greater than on the 6th. The wind showed a cyclonic circulation in Burma, but otherwise there was no change in the main wind currents. The chart of the 8th showed that the Burma depression had passed southward and that the centre lay over the Gulf of Martaban. The cyclonic circulation in this region had consequently undergone a slight change, but the wind directions elsewhere were practically unaltered. On the 9th a brisk barometric rise had occurred over North-Western India, and the high pressure area had spread north-westward to the Punjab and the Indus Valley. Barometric differences were slightly greater, but otherwise the general distribution of pressure and directions of the wind were the same as those prevailing on the 5th. On the 10th owing to the continued barometric rise in the north-west and the more or less general fall elsewhere, barometric differences became moderately large for the season, and strongish winds were reported over Northern India. The relative distribution of pressure was not, however, altered, and a general anticyclonic circulation of the wind prevailed over the greater part of India. On the 11th pressure was giving way in the Indus Valley, and the high pressure area again showed a tendency to centre over the Central Provinces and Central India. In other respects there was no change.

*Temperature.*—The past week, like its predecessors for some time, has been cool in almost all parts of India. In the Punjab, Bombay, the Central Provinces, Guzerat, Sind and Rajputana, the mean temperature for every day was below the normal average. In the other Provinces, *viz.*, Burma, Bengal, the North-Western Provinces and Madras, greater irregularities are shown, but with the exceptions of Burma where there is no departure from the average, and Bengal where there is an excess of about half a degree, the net results at the close of the week for these Provinces also exhibit a defect.

The following Table shows the amount of excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week:—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
Burma . . . . .	0	0
Bengal . . . . .	—0·7	0
North-Western Provinces . . . . .	—0·5	+0·6
Punjab . . . . .	+0·8	—1·2
Bombay . . . . .	+1·3	—2·1
Central Provinces . . . . .	—2·5	—2·1
Guzerat and Central India . . . . .	—2·6	—3·8
Sind and Rajputana . . . . .	—1·5	—2·5
Madras . . . . .	—0·7	—3·5
	+0·2	—0·7

The night temperatures over the central parts of the country and the Peninsula have been remarkably low.

*Rain.*—There is very little to record in the matter of rainfall. The great majority of the rainfall districts have received no rain whatever during the past week. The only districts reporting any excess are Tenasserim and Central Burma, and the only districts reporting any rainfall at all are Tenasserim, Lower, Central and Upper Burma, Assam (Surma), Deltaic Bengal, Malabar, the East Coast Central and South, and Madras South. The slight fall reported from Hyderabad South is very doubtful. It is only in the south of the Peninsula that any considerable amount of rain is usually expected during the week under review, and it is probably only in this region that the want of rain is of serious importance. Within this region the most important deficiencies of the north-east monsoon rainfall from 15th October to date are 14 inches at Negapatam, 11 inches at Madras, 8 inches at Wellington, 7 inches at Madura, and about 6 inches at Salem.

**SUPPLEMENT TO THE GAZETTE OF INDIA, NOVEMBER 23, 1889. 1299**

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING 11TH NOVEMBER 1889.			RAINFALL DATA FROM OCTOBER 15TH TO 11TH NOVEMBER 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, October 15th to 11th Nov- ember.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . . .	1'45	0'37	+0'88	16'20	4'40	+268
	Lower Burma . . . . .	0'37	1'17	-0'80	5'92	4'25	+39
	Central do. . . . .	0'91	0'39	+0'32	5'25	3'04	+73
	Upper do. . . . .	0'31	?	?	2'98	?	?
	Arakan . . . . .	0	1'51	-1'51	5'41	4'31	+26
BENGAL AND ASSAM.	Eastern Bengal . . . . .	0	0'35	-0'35	4'26	3'16	+35
	Assam (Surma) . . . . .	0'01	0'49	-0'48	2'47	3'39	-27
	Do. (Brahmaputra) . . . . .	0	0'15	-0'15	0'03	1'89	-50
	Deltaic Bengal . . . . .	0'02	0'17	-0'15	4'72	2'78	+62
	Central do. . . . .	0	0'16	-0'16	0'80	2'33	-66
	North do. . . . .	0	0'03	-0'03	0'36	2'34	-85
	Orissa . . . . .	0	0'53	-0'53	5'45	4'53	+20
	Chutia Nagpur . . . . .	0	0'11	-0'11	0'77	1'57	-51
	Behar (South) . . . . .	0	0'10	-0'10	0'36	1'40	-74
	Do. (North) . . . . .	0	0'04	-0'04	0	1'25	-100
NORTH-WESTERN PROVINCES AND ODDH.	North-Western Provinces (East) . . . . .	0	0'05	-0'05	0'75	0'79	-5
	Oudh (South) . . . . .	0	0	0	0'05	0'33	-85
	Do. (North) . . . . .	0	0	0	0	0'11	-100
	North-Western Provinces (Central) . . . . .	0	0	0	0'01	0'35	-97
	North-Western Provinces (West) . . . . .	0	0'01	-0'01	0	0'03	-100
	North-Western Provinces (Submontane) . . . . .	0	0'03	-0'03	0'03	0'26	-88
PUNJAB.	Punjab (South) . . . . .	0	0	0	0	0'08	-100
	Do. (Central) . . . . .	0	0	0	0	0'18	-100
	Do. (Submontane) . . . . .	0	0	0	0	0'01	-100
	Do. (Hill Districts) . . . . .	0	0'07	-0'07	0	0'31	-100
	Do. (North-west) . . . . .	0	0'04	-0'04	0'02	0'27	-100
	Do. (West) . . . . .	0	0	0	0	0'03	-100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS.)	Malabar . . . . .	0'93	1'88	-0'95	9'11	7'95	+15
	Madras (South Central) . . . . .	0	2'21	-2'21	3'60	7'61	-53
	Coorg . . . . .	0	1'57	-1'57	10'96	7'04	+56
	Mysore . . . . .	0	0'47	-0'47	2'10	3'66	-43
	Konkan . . . . .	0	0'24	-0'24	4'84	1'74	+173
	Bombay Deccan . . . . .	0	0'32	-0'32	4'96	2'70	+80
	Hyderabad (North) Khandeish . . . . .	0	0'24	-0'24	1'26	2'24	-44
CENTRAL PROVIN- CES AND BERAR.	Berar . . . . .	0	0'11	-0'11	3'14	1'69	+86
	Central Provinces (West) . . . . .	0	0'06	-0'06	2'95	0'83	+253
	Do. (Central) . . . . .	0	0'06	-0'06	1'72	0'67	+157
	Do. (East) . . . . .	0	0'15	-0'15	1'35	0'95	+42
BOMBAY (NORTH)	Guzerat . . . . .	0	0'03	-0'03	0'02	0'38	-95
	Kattiawar . . . . .	0	0'04	-0'04	0	0'17	-100
	Sind . . . . .	0	0'01	-0'01	0	0'03	-100
RAJPUTANA AND CENTRAL INDIA.	Central India (East) Rajputana (East), Central India (West) . . . . .	0	0'01	-0'01	0'13	0'44	-70
	Rajputana (West) . . . . .	0	0'01	-0'01	0	0'25	-100
	Rajputana (West) . . . . .	0	0'01	-0'01	0	0'09	-100
MADRAS.	East Coast (North) . . . . .	0	0'72	-0'72	6'54	5'87	+11
	Do. (North) (a) . . . . .	0	?	?	6'25	?	?
	Hyderabad (South) . . . . .	0'01	0'22	-0'21	1'99	1'72	+15
	Madras (Central) . . . . .	0	0'53	-0'53	3'78	3'23	+17
	East Coast (Central) Do. (South) . . . . .	0'01	1'82	-1'81	7'61	8'34	-9
	Do. (South) . . . . .	0'03	2'48	-2'45	2'62	8'60	-70
	Madras (South) . . . . .	0'85	2'40	-1'55	2'19	8'29	-74

W. L. DALLAS,

Calcutta, 14th November, 1889.

*Assistant Meteorological Reporter to the  
Government of India.*

J. W. P. MUIR-MACKENZIE,

*Off. Secretary to the Government of India.*





## RETAIL PRICES FOR THE 1st HALF OF OCTOBER 1959—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

Districts.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAM ( <i>Sorghum vulgare</i> ).		BAJRA OR CUMBU ( <i>Pennisetum typhoides</i> ).		MARUA OR RAGI ( <i>Eleusine coracana</i> ).		KANGNI OR KAKEN, ITALIAN MILLET ( <i>Setaria italica</i> ).		GRAM, CHENNA, CHOLA, RADALAY OR SUTAGA ( <i>Cicer arachinum</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARHAR, OR TRUE, CADIAN PEA ( <i>Cajanus indicus</i> ).		FIREWOOD.		SALT.			
	Present		Past		Present		Past		Present		Past		Present		Past		Present		Past		Present		Past		Present		Past	
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Bengal—continued.																												
Baker, north—																												
Bhojpur	16 13	16 4	16 13	17 13	11 9	11 4	13 2	13 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cooch	14 12	14 12	20 0	20 0	16 0	9 8	15 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fakra	17 0	17 0	22 0	20 0	16 0	11 0	14 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shahabad	14 0	14 0	17 0	17 0	9 0	9 0	12 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baker, north—																												
Purnea	16 0	16 0	...	...	9 0	9 0	12 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhagalpur	18 4	16 11	16 6	16 6	12 0	11 0	11 14	11 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Darbhanga	16 0	15 8	16 6	19 8	11 6	10 8	17 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Morshapora	24 0	15 8	19 0	19 0	10 0	9 9	13 0	11 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saran	15 0	15 8	18 8	19 0	8 0	8 8	11 8	11 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Champaran	14 0	14 0	17 0	17 0	8 0	10 0	16 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
N.W. Provinces—																												
Eastern—																												
Mirzapur	13 0	13 0	18 0	17 0	7 0	7 0	12 0	11 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benares	14 14	13 13	19 0	18 11	10 0	9 7	10 0	10 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ghazipur	14 0	14 14	17 6	18 0	7 0	7 0	12 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jaunpur	14 0	14 0	20 0	20 0	7 0	7 0	12 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Allahabad	13 8	14 0	19 0	19 0	7 0	7 0	12 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central—																												
Banda	15 0	15 0	21 8	20 8	7 8	7 8	11 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fatehpur	14 8	14 8	21 0	21 8	14 0	14 0	16 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Farrukpur	16 0	16 0	20 0	20 0	9 0	9 0	10 0	10 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fauzpur	17 0	16 8	22 4	23 8	9 0	9 0	11 0	11 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cannore	16 0	16 0	20 0	20 0	9 0	9 0	10 0	10 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Etawah	17 6	17 12	29 0	27 8	5 4	5 4	8 8	9 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pankhahad	16 0	16 4	22 8	24 0	4 8	4 8	8 8	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mainpuri	16 0	16 4	22 8	24 0	4 8	4 8	8 8	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Roha	16 2	17 12	24 8	26 4	4 8	4 8	8 8	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ritha	16 12	17 6	25 2	26 0	7 8	7 8	11 8	16 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western—																												
Lalitpur	15 8	15 8	21 0	20 0	9 0	9 0	10 0	10 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jhansi	16 11	16 11	22 0	21 2	7 12	7 12	11 8	11 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Agra	15 0	15 0	21 0	21 0	5 0	5 0	9 0	9 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Muttra	15 0	15 8	21 0	21 8	5 0	5 0	9 0	9 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Aligarh	16 8	16 8	23 8	23 0	6 0	6 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bulandshahr	18 2	18 2	26 0	27 0	7 0	7 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	17 0	18 0	27 0	28 0	7 0	7 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sub-montane—																												
Palla	14 8	14 8	18 0	19 4	10 4	9 4	13 8	13 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Azamgarh	17 8	17 8	18 8	18 8	10 4	10 4	13 8	13 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gorakhpur	16 0	16 0	19 0	18 0	8 0	8 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bahraich	17 0	17 0	19 0	18 0	8 0	8 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saharanpur	17 8	17 8	20 8	20 8	8 0	8 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Banda	17 8	17 4	20 8	20 8	8 0	8 0	10 8	10 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pilibhit	15 10	15 14	28 0	28 0	13 12	13 12	16 4	16 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

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§ Six pice per bundle.

† For unshaded grain.

‡ New 16-0; old 10-0.



## RETAIL PRICES FOR THE 1st HALF OF OCTOBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

Districts.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLDA (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANOHI OR KAKUNI, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, RADALAY OR SUNAGA (Cicer arvensis).		MAIZE (Zea Mays).		ARAB, OR THUR, CADIAN TEA (Coffea arabica).		FIREWOOD.		SALT.	
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.
<b>Punjab—</b>																										
Southern—																										
Hissar	19 0	19 0	30 0	26 0	...	...	9 0	8 0	24 0	23 0	22 0	21 0	...	...	20 0	20 0	28 0	28 0	17 0	17 0	...	...	110 0	105 0	21 0	16 0
Ferozpur	20 0	20 0	36 0	36 0	...	...	9 0	9 0	28 0	28 0	24 0	24 0	...	...	26 0	26 0	31 0	31 0	30 0	26 0	...	...	100 0	100 0	13 4	13 4
Montgomery	19 0	18 0	25 0	25 0	...	...	9 0	8 0	20 0	20 0	15 0	15 0	...	...	...	...	25 0	25 0	24 0	24 0	...	...	200 0	200 0	11 0	11 0
<b>Central—</b>																										
Gurgaon	17 0	18 0	28 0	28 0	...	...	10 0	9 0	25 0	25 0	23 0	23 0	...	...	...	...	26 0	26 0	24 0	24 0	...	...	130 0	130 0	11 0	11 0
Delhi	17 0	18 0	23 0	25 0	...	...	10 0	10 0	24 0	25 0	19 0	20 0	...	...	18 0	16 0	23 0	23 0	23 0	23 0	...	...	80 0	80 0	11 0	11 0
Rohilkhand	17 0	17 0	23 0	23 0	...	...	11 0	9 0	25 0	25 0	22 0	22 0	...	...	16 0	16 0	24 0	24 0	18 0	18 0	...	...	120 0	120 0	10 0	10 0
Kanpur	16 0	18 0	25 0	27 0	...	...	11 0	11 0	20 0	20 0	16 0	16 0	...	...	18 0	18 0	25 0	25 0	25 0	25 0	...	...	120 0	120 0	10 0	10 0
Lahore	19 0	19 0	35 0	34 0	...	...	11 0	9 0	29 0	29 0	16 0	16 0	...	...	22 0	22 0	30 0	30 0	27 0	27 0	...	...	85 0	85 0	12 0	12 0
<b>Sub-montane—</b>																										
Unbhatta	20 0	21 0	24 0	26 0	...	...	11 0	10 0	30 0	30 0	17 0	16 0	...	...	8 0	8 0	28 0	28 0	25 0	25 0	...	...	120 0	120 0	13 0	13 0
Ludhiana	21 0	21 0	40 0	40 0	...	...	12 0	12 0	29 0	30 0	22 0	22 0	...	...	21 0	21 0	30 0	30 0	30 0	30 0	...	...	110 0	110 0	12 8	12 8
Jullundur	21 0	22 0	32 0	32 0	...	...	8 0	8 0	26 0	26 0	20 0	20 0	...	...	20 0	20 0	28 0	28 0	32 0	32 0	...	...	100 0	100 0	12 8	12 8
Hoshiarpur	22 0	22 0	33 0	33 0	...	...	10 0	10 0	28 0	28 0	20 0	20 0	...	...	24 0	24 0	30 0	30 0	30 0	30 0	...	...	100 0	100 0	13 0	13 0
Gurdaspur	22 0	22 0	28 0	28 0	...	...	12 0	12 0	24 0	24 0	14 0	14 0	...	...	12 0	12 0	27 0	27 0	24 0	24 0	...	...	120 0	120 0	12 0	12 0
Amritsar	21 0	22 0	31 0	33 0	...	...	11 0	11 0	25 0	25 0	16 0	16 0	...	...	23 0	23 0	29 0	29 0	24 0	24 0	...	...	90 0	90 0	13 0	13 0
<b>Hills—</b>																										
Simla	14 0	14 0	20 0	20 0	...	...	8 0	8 0	15 0	15 0	11 0	11 0	...	...	8 0	8 0	19 0	19 0	20 0	20 0	...	...	65 0	65 0	8 8	8 8
Kangra	19 0	19 0	28 0	28 0	...	...	12 0	11 0	14 0	14 0	10 0	10 0	...	...	...	...	22 0	22 0	23 0	23 0	...	...	100 0	100 0	11 0	11 0
<b>North-western—</b>																										
Sialkote	22 0	22 0	36 0	36 0	...	...	12 0	12 0	28 0	28 0	25 0	25 0	...	...	34 0	32 0	28 0	28 0	28 0	28 0	...	...	160 0	160 0	13 0	13 0
Gujranwala	21 0	21 0	40 0	40 0	...	...	8 0	9 0	30 0	30 0	20 0	20 0	...	...	20 0	20 0	30 0	30 0	25 0	25 0	...	...	105 0	105 0	13 0	13 0
Gujrat	22 0	23 0	35 0	35 0	...	...	11 0	10 0	30 0	30 0	28 0	28 0	...	...	14 0	12 0	27 0	27 0	28 0	28 0	...	...	120 0	120 0	14 0	14 0
Jhelum	23 0	24 0	35 0	35 0	...	...	10 0	11 0	30 0	32 0	20 0	20 0	...	...	16 0	16 0	28 0	28 0	27 0	27 0	...	...	100 0	100 0	14 0	14 0
Rawalpindi	21 0	21 0	45 0	40 0	...	...	7 0	7 0	40 0	40 0	21 0	21 0	...	...	16 0	16 0	26 0	26 0	29 0	29 0	...	...	85 0	85 0	13 8	13 8
Hazara	23 0	23 0	41 0	42 0	...	...	10 0	10 0	16 0	16 0	14 0	14 0	...	...	12 0	12 0	21 0	21 0	29 0	29 0	...	...	120 0	120 0	11 0	11 0
Peshawar	22 0	22 0	48 0	40 0	...	...	11 0	11 0	44 0	44 0	21 0	21 0	...	...	18 0	18 0	24 0	24 0	31 0	31 0	...	...	80 0	80 0	37 0	36 0
Kohat	22 0	23 0	47 0	45 0	...	...	15 0	15 0	...	...	32 0	32 0	...	...	...	...	24 0	24 0	32 0	32 0	...	...	125 0	125 0	55 0	50 0
<b>Western—</b>																										
Shahpur	23 0	24 0	35 0	35 0	...	...	10 0	9 0	26 0	26 0	26 0	26 0	...	...	20 0	20 0	31 0	31 0	26 0	26 0	...	...	240 0	240 0	13 0	13 0
Jhang	20 0	22 0	32 0	31 0	...	...	9 0	8 0	22 0	22 0	17 0	18 0	...	...	22 0	22 0	21 0	21 0	24 0	24 0	...	...	200 0	200 0	12 0	12 0
Multan	16 0	16 0	27 0	26 0	...	...	10 0	10 0	26 0	26 0	19 0	20 0	...	...	25 0	25 0	22 0	22 0	21 0	21 0	...	...	100 0	100 0	12 0	12 0
Bannu	29 0	28 0	44 0	39 0	...	...	14 0	10 0	33 0	35 0	31 0	31 0	...	...	8 0	8 0	33 0	33 0	34 0	34 0	...	...	60 0	60 0	40 0	40 0
D. I. Khan	21 0	21 0	32 0	34 0	...	...	9 0	7 0	25 0	25 0	23 0	23 0	...	...	6 0	6 0	27 0	27 0	19 0	19 0	...	...	112 0	112 0	44 0	43 0
Muzaffargarh	18 0	18 0	26 0	27 0	...	...	13 0	13 0	18 0	17 0	18 0	17 0	...	...	...	...	20 0	20 0	...	...	...	...	110 0	110 0	12 0	12 0
D. G. Khan	16 0	17 0	24 0	24 0	...	...	8 0	8 0	23 0	23 0	23 0	21 0	...	...	...	...	20 0	20 0	...	...	...	...	125 0	125 0	27 0	26 0
<b>Sind and Baluchistan—</b>																										
Karachi	32 0	32 0	17 0	18 0	...	...	11 0	11 0	16 0	16 0	15 0	15 0	...	...	...	...	18 0	18 0	16 0	16 0	...	...	90 0	90 0	13 0	14 0
Hyderabad (Gido Bandar)	13 0	13 0	17 0	15 0	...	...	11 0	9 0	23 0	19 0	17 0	15 0	...	...	...	...	16 0	16 0	...	...	...	...	160 0	160 0	11 8	12 0
Thar and Parkar (Unakot)	15 0	14 0	...	...	...	...	13 0	13 0	...	...	15 0	15 0	...	...	...	...	...	...	...	...	...	...	160 0	160 0	12 8	12 8
Sukkur	15 0	14 0	20 0	...	...	...	13 0	10 0	22 0	20 0	19 0	19 0	...	...	...	...	...	...	...	...	...	...	140 0	140 0	11 5	11 4
Shikarpur	12 13	12 13	18 14	18 14	...	...	9 0	8 0	14 0	14 0	23 0	23 0	...	...	...	...	18 0	18 0	...	...	...	...	125 0	125 0	11 0	11 0
Upper Sind Frontier	13 13	13 13	19 0	18 0	...	...	9 0	8 0	23 0	23 0	23 0	23 0	...	...	...	...	...	...	...	...	...	...	160 0	160 0	11 0	11 0
Quetta	15 13	15 13	19 0	18 0	...	...	9 0	8 0	23 0	23 0	23 0	23 0	...	...	...	...	...	...	...	...	...	...	160 0	160 0	11 0	11 0

[illegible]

6 Firewood is sold by head-loads, cart-loads, and bulk-loads.

2. 3<sup>rd</sup> of procurable.

\* Not produced.

Not sold.

## RETAIL PRICES FOR THE 1st HALF OF OCTOBER 1889—continued.

Districts.	QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.									
	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLAR (Sorghum vulgare).	
	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.
Districts.	MAHUA OR RAGI (Eleusine indica).		BAJRA OR DUMBU (Pennisetum typhoides).		KANGRI OR KANUN, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUGA (Cicer arietinum).		MAIZE (Zea Mays).	
	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Districts.	ACTAR, OR THOR, CADJAY PEA (Cajanus indicus).		FIREWOOD.		SALT.					
	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.	Present forwght.	Past forwght.
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Madras—										
Malabar Coast—										
Malabar . . . . .	8 10	8 10	...	...	11 5	11 5	12 3	12 3	...	...
S. Canara . . . . .	8 2	8 2	...	...	10 10	9 14	11 5	10 13	...	...
South, central—										
Combatore . . . . .	11 2	11 2	...	...	12 3	12 3	13 3	13 3	...	...
Nilgiris . . . . .	19 11	10 11	...	...	9 10	9 10	10 6	10 6	...	...
Salem . . . . .	10 13	10 13	...	...	11 13	11 13	13 3	13 3	...	...
Central—										
Bellary . . . . .	13 6	13 6	...	...	11 3	11 3	13 0	13 0	...	...
Anantapur . . . . .	17 8	17 8	...	...	12 13	12 13	14 0	14 0	...	...
Cuddapah . . . . .	14 8	14 8	...	...	11 13	11 13	12 6	12 6	...	...
Kurnool . . . . .	10 13	10 13	...	...	10 11	10 11	11 6	11 6	...	...
East Coast, north—										
Ganjam . . . . .	8 14	8 14	...	...	10 0	10 0	11 0	11 0	...	...
Vinayapatnam . . . . .	10 8	10 8	...	...	10 2	9 8	11 5	10 11	...	...
Godavari . . . . .	8 2	8 2	...	...	15 6	14 6	16 8	15 0	...	...
East Coast, central—										
Kistna . . . . .	10 6	10 6	...	...	13 11	13 11	14 5	14 5	...	...
Nellore . . . . .	11 8	11 8	...	...	13 13	13 13	14 13	14 13	...	...
East Coast, south—										
Madras . . . . .	10 13	10 13	...	...	11 8	11 10	12 10	12 11	...	...
Chingleput . . . . .	...	...	...	...	12 0	12 0	13 13	13 13	...	...
N. Arcot . . . . .	9 11	9 11	...	...	11 10	11 10	13 3	13 3	...	...
S. Arcot . . . . .	8 10	8 10	...	...	13 2	13 2	14 0	14 0	...	...
Tanjore . . . . .	8 13	8 13	...	...	12 11	13 11	15 14	15 14	...	...
Trenchinopoly . . . . .	8 10	8 14	...	...	12 3	12 3	13 11	13 11	...	...
South—										
Tinnevely . . . . .	8 8	8 8	...	...	11 2	11 2	13 0	13 0	...	...
Madura . . . . .	9 11	9 11	...	...	11 13	11 13	12 8	12 8	...	...
Myore—										
Myore . . . . .	10 0	10 0	...	...	9 8	9 8	10 12	10 8	...	...
Bangalore . . . . .	10 13	10 8	...	...	10 4	10 4	11 8	11 8	...	...
Kolar . . . . .	...	...	...	...	9 8	9 8	10 12	10 12	...	...
Tonkur . . . . .	11 0	11 0	...	...	11 0	11 0	12 0	12 0	...	...
Hassan . . . . .	...	...	...	...	10 0	10 0	11 0	11 0	...	...
Kadur . . . . .	10 0	10 0	...	...	11 0	11 0	12 0	12 0	...	...
Shimoga . . . . .	10 8	10 8	...	...	11 0	11 0	12 0	12 0	...	...
Chitaldrug . . . . .	12 0	13 0	...	...	15 0	15 0	16 0	16 0	...	...
Coorg—										
Coorg . . . . .	9 0	9 0	...	...	8 0	8 0	10 8	10 8	...	...
Aden . . . . .	8 0	8 0	...	...	6 3	6 3	8 0	8 0	...	...

\* Not sold.

**GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.**

*Comparative Statement of the Net Indian Sea and Land Customs Revenue (excluding Salt Revenue) for the first seven months of the official year 1889-90, and of the eighteen preceding years.*  
(IN THOUSANDS OF RUPEES.)

FOR THE SEVEN MONTHS, APRIL TO OCTOBER.																						
YEAR.	BOMBAY.				SINDH.				MADRAS.				BURMA.				TOTAL BRITISH INDIA.					YEAR.
	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Imports.	Export Revenue.	Total Revenue.					
1871-72	580	4151	1168	5899	421	2372	219	3012	73	71	97	241	90	239	1072	1401	1363	2564	8939	3383	12314	1871-72
1872-73	716	4207	1277	6200	319	2387	180	2886	65	65	129	259	182	272	1953	2406	1508	7616	9124	4104	12318	1872-73
1873-74	584	4014	935	5533	346	2311	178	2835	71	46	■	183	103	278	1546	2019	1423	7436	8839	3531	12370	1873-74
1874-75	668	4552	680	5903	388	2613	194	3195	66	38	76	180	228	375	1024	1637	1551	8073	9924	2760	12684	1874-75
1875-76	692	4356	811	5859	390	2260	345	2993	73	54	■	219	218	278	1851	2347	1670	7781	5391	3867	13238	1875-76
1876-77	723	3709	741	5263	457	2210	58	2725	90	42	13	145	259	304	1300	1863	1849	7997	8946	2614	12560	1876-77
1877-78	846	4756	864	6466	489	2579	59	3120	119	49	22	190	281	333	965	1579	2042	8180	10222	2017	12239	1877-78
1878-79	745	3884	775	5404	478	2332	125	2935	103	32	11	146	399	348	230	884	2057	7191	9248	2603	12553	1878-79
1879-80	668	3570	523	4761	519	1968	102	2589	179	45	11	235	311	334	370	2493	2073	6477	8550	2745	12995	1879-80
1880-81	752	3456	651	4869	489	2825	803	3417	260	64	13	337	282	614	521	1417	268	7422	9473	3234	12597	1880-81
1881-82	750	3269	880	4999	589	2550	85	3424	224	71	17	312	278	569	338	1185	393	6901	9135	3612	12717	1881-82
1882-83	802	2	884	1688	583	1305	78	556	203	4	31	238	318	1	241	560	467	—03	2286	4071	6551	1882-83
1883-84	783	1020	1020	1813	608	21	69	698	205	2	27	234	288	7	310	605	466	50	2300	3456	5846	1883-84
1884-85	690	20	578	1248	569	22	93	686	221	3	28	252	270	1	347	618	443	52	2245	2556	4801	1884-85
1885-86	746	14	717	1477	669	27	53	749	242	3	39	290	277	5	217	499	366	53	2359	3409	5768	1885-86
1886-87	722	25	596	1343	669	32	64	765	265	7	53	325	345	10	325	680	505	84	2500	3006	5396	1886-87
1887-88	680	20	728	1487	821	26	90	938	285	4	44	333	560	4	280	844	525	64	2436	3006	5396	1887-88
1888-89	837	353	910	2100	814	246	183	1128	311	62	22	395	588	54	308	950	501	778	3829	2678	6507	1888-89
1889-90	806	540	668	2012	893	350	106	1146	316	47	29	302	595	25	421	1041	471	938	4018	3489	7507	1889-90

\* The amount refunded is greater than the duty collected.

DEPARTMENT OF FINANCE AND COMMERCE,

STATISTICAL BRANCH;

Calcutta, 19th November, 1889.

E. J. SINKINSON,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXX of 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 27TH OCTOBER 1888.			WEEK ENDING 20TH OCTOBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 27TH OCTOBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 20TH OCTOBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.
		Total length open.	Receipts.	Per mile open.	Total length open.	Receipts.	Per mile open.	Total.	Per mile open per week.	Total.	Per mile open per week.		
			R	R		R	R	R	R	R	R	R	R
2nd Nov., 1889	State Lines worked by Companies	1,514	9,01,262	595	1,526	(a) 8,10,151	531	2,38,61,951	525	(a) 2,40,85,644	536	2,23,693	...
2nd ditto	East Indian	57	9,478	166	57	8,494	149	2,86,700	167	2,67,308	156	...	19,337
...	Patna-Gya	12	500	49	...	(b) ...	...	35,737	108	(b) ...	...	...	38,737
...	Bildarnagar-Chazipur	35	7,161	95	...	(c) ...	...	2,03,739	91	(c) ...	...	...	2,03,739
2nd Nov., 1889	Simla	1,664	3,75,341	226	1,672	3,12,000	187	1,02,11,217	205	(d) 1,07,15,093	215	5,03,846	...
2nd ditto	Rajputana-Malwa	183	19,712	108	305	(e) 23,708	78	8,21,912	147	(e) 8,81,732	109	1,59,820	...
2nd ditto	Bengal-Nagpur (f)	854	84,143	98	978	48,359	49	22,31,351	87	22,92,348	88	61,077	...
2nd ditto	Southern Mahratta (g)	...	...	...	...	...	...	3,42,327	82	3,11,057	60	1,60,300	...
...	Ditto Mysore Section	140	13,044	100	206	18,523	63	3,86,665	95	(g) 15,85,680	70	1,99,015	...
2nd ditto	Indian Midland	136	11,807	87	746	(h) 37,206	77	1,44,400	50	1,42,099	57	...	2,301
2nd ditto	Villupuram-Guntur, Nellore Branch	83	4,246	51	83	3,073	44	45,000	43	55,622	53	...	...
26th Oct., 1889	Bareilly-Pilibhit	36	2,581	72	36	1,800	52	...	...	...	...	...	...
	<b>TOTAL</b>	<b>4,754</b>	<b>14,20,355</b>	<b>301</b>	<b>5,099</b>	<b>12,84,234</b>	<b>225</b>	<b>3,85,73,908</b>	<b>270</b>	<b>4,06,37,218</b>	<b>249</b>	<b>20,63,310</b>	<b>...</b>
2nd Nov., 1889	State Lines worked by Government.	2,469	6,24,861	253	2,478	5,64,262	228	1,43,09,868	192	1,55,88,095	211	12,78,327	...
26th Oct., 1889	North-Western (h)	692	1,31,208	190	692	1,24,473	180	38,20,543	194	42,30,532	204	4,10,000	...
26th ditto	Onda and Rohilkhand	125	15,391	123	125	10,030	80	4,10,172	111	4,31,355	115	15,384	...
26th ditto	Bengal Central	45	17,984	400	45	13,254	310	4,25,947	314	4,30,145	327	15,194	...
2nd Nov., 1889	Wardha Coal	673	2,92,539	435	747	2,50,920	336	58,04,739	292	60,15,832	280	1,21,093	...
2nd ditto	Eastern Bengal	47	1,818	67	27	1,715	63	57,000	73	54,818	69	...	2,808
2nd ditto	Nalhati	273	30,755	113	273	36,340	133	9,14,414	121	10,55,201	133	1,40,787	...
26th Oct., 1889	Tripot	105	6,116	58	105	4,260	41	1,43,097	46	1,79,655	57	34,658	...
2nd Nov., 1889	Lucknow-Sitapur-Sibramau	25	1,039	42	25	1,138	46	35,700	48	35,400	49	720	...
2nd ditto	Jorhat	7	313	45	7	200	41	4,039	19	5,033	24	934	...
2nd ditto	Cherra-Companyganj-Dyrma (i)	392	62,228	159	553	93,909	168	16,41,339	147	25,70,710	161	9,28,421	...
	<b>TOTAL</b>	<b>4,833</b>	<b>11,84,279</b>	<b>245</b>	<b>5,077</b>	<b>11,00,291</b>	<b>217</b>	<b>2,70,93,483</b>	<b>192</b>	<b>3,01,11,845</b>	<b>203</b>	<b>30,48,363</b>	<b>...</b>
2nd Nov., 1889	Lines worked by Guaranteed Companies	840	2,07,002	246	840	1,77,311	211	49,07,063	105	53,27,084	212	4,20,021	...
2nd ditto	Madras	634	1,01,887	159	634	85,846	131	32,23,771	104	33,40,667	172	1,25,896	...
26th Oct., 1889	South Indian	1,504	(j) 6,01,272	439	1,440	(k) 4,39,889	306	(l) 2,31,77,843	514	(m) 1,70,60,197	443	55,21,645	...
26th ditto	Great Indian Peninsula	451	2,30,570	500	461	1,75,000	380	69,36,915	502	70,74,813	514	1,37,898	...
	<b>TOTAL</b>	<b>3,450</b>	<b>11,09,731</b>	<b>347</b>	<b>3,395</b>	<b>8,78,046</b>	<b>259</b>	<b>3,82,45,302</b>	<b>369</b>	<b>3,34,18,661</b>	<b>330</b>	<b>48,26,931</b>	<b>...</b>
	<b>GRAND TOTAL (GUARANTEED AND STATE)</b>	<b>13,646</b>	<b>38,14,395</b>	<b>292</b>	<b>14,171</b>	<b>32,62,571</b>	<b>230</b>	<b>10,44,82,983</b>	<b>267</b>	<b>10,46,67,225</b>	<b>252</b>	<b>1,84,742</b>	<b>...</b>
	<b>GROSS ESTIMATED EXPENSES</b>	...	...	...	...	...	...	<b>5,45,19,632</b>	<b>130</b>	<b>5,46,81,670</b>	<b>132</b>	<b>1,61,038</b>	<b>...</b>
	<b>NET RECEIPTS</b>	...	...	...	...	...	...	<b>4,99,63,351</b>	<b>128</b>	<b>4,99,86,055</b>	<b>120</b>	<b>22,704</b>	<b>...</b>
2nd Nov., 1889	Assisted Companies	22	5,386	245	22	3,642	166	1,52,537	242	1,58,026	241	...	1,511
19th Oct., 1889	Tarakeshwar	...	...	...	...	(n) ...	...	(o) 2,50,506	111	(p) 2,71,121	120	20,553	...
2nd Nov., 1889	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...
26th Oct., 1889	Bengal and North-Western	376	32,357	86	376	32,170	86	13,16,660	117	13,61,261	121	44,502	...
...	Rohilkhand-Kumaun	67	7,409	110	67	8,708	130	2,10,113	108	2,24,701	116	14,588	...
	<b>TOTAL</b>	<b>405</b>	<b>45,642</b>	<b>98</b>	<b>405</b>	<b>44,525</b>	<b>96</b>	<b>19,36,887</b>	<b>119</b>	<b>20,15,100</b>	<b>124</b>	<b>78,222</b>	<b>...</b>
2nd Nov., 1889	Native States.	310	35,779	115	354	44,450	126	9,37,125	108	12,85,012	122	3,47,887	...
2nd ditto	His Highness the Nizam's Guaranteed	59	2,566	44	39	1,460	25	24,706	42	75,032	43	326	...
2nd ditto	His Highness the Gaekwar's	21	864	41	27	530	20	26,215	41	30,302	38	4,087	...
2nd ditto	His Highness the Gaekwar's Virangam	200	17,281	83	330	14,017	45	5,71,429	97	7,34,603	97	1,62,074	...
26th Oct., 1889	Mehanna-Vadnagar	68	3,033	45	68	2,150	32	1,01,017	50	1,10,009	54	9,082	...
2nd Nov., 1889	Bhavanagar-Gandhi-Junagadh-Portbandar	124	5,721	46	124	6,300	51	2,01,212	54	1,04,148	52	...	7,064
	<b>TOTAL</b>	<b>791</b>	<b>65,444</b>	<b>87</b>	<b>961</b>	<b>60,542</b>	<b>73</b>	<b>19,12,004</b>	<b>84</b>	<b>24,20,856</b>	<b>90</b>	<b>5,17,852</b>	<b>...</b>

(a) Includes the Dildarnagar-Chazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Kabi-Mania Branch.

(e) Includes the Santora Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Jellary-Kistna State Railway.

(g) Includes the Simla and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Patankot and Rajpura-Bhatinda State Railways.

(i) Includes the Tougoo-Mandafay extension.

(j) Includes the Dhand-Mannad, Khamsaun, Amraoti and Bhopal-Itarsi State Railways.

(k) Includes the Dhand-Mannad, Khamsaun and Amraoti State Railways.

(l) Includes the Patni Branch.

(m) Return not received.

(n) Total receipts from 1st April to 20th October, 1888.

(o) Total receipts from 1st April to 19th October, 1889.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

CALCUTTA,

The 21st November, 1889.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—(No report received.)

**Bombay.**—*For week ending 20th November.*—Prospects of cotton and other crops good, except in parts where damaged by locusts or disease. Harvesting and sowing operations in full progress. Fodder and water-supply generally sufficient and agricultural stock healthy.

**Bengal.**—*For week ending 19th November.*—Rainfall during the week has been general and rather heavy in Bengal and Orissa, while showers have fallen in Behar and Chota Nagpore. Weather is still unsettled and further rain is likely to fall. The heavy rain has done some harm to the rice harvest and also to some of the young *rabi* crops. In Behar, however, the rain has benefited the *rabi* sowings, which are nearly complete. Poppy cultivation is progressing satisfactorily except in Monghyr and the Hajipore Sub-Division of Mozufferpore, where the sowings are backward for want of rain. Tobacco is being transplanted and doing well, and the transplanting of *ganja* in the Rajshahye district is finished. Sugarcane has benefited by the week's rainfall, and is doing well. Betul-nut in Tipperah and Noakholly is estimated to be a 14-anna crop. Prices of rice are falling steadily in the Behar districts generally, while in almost all other districts of the province no marked fluctuations are reported.

**North-Western Provinces and Oudh.**—*For week ending 20th November.*—The weather has been more or less cloudy over the eastern districts, with light rain here and there. Agricultural prospects generally continue fair. A flight of locusts passed over portions of the Agra and Banda districts, but did very little injury to the crops; they also appeared in three parganas of the Jhansi district, the extent of the injury done is not yet known. Markets are amply supplied. Prices easy.

**Punjab.**—*For week ending 20th November.*—No rain. Prices unsettled in Delhi and Multan, rising in Ambala and Rawalpindi, stationary elsewhere. Harvesting of *kharif* crops nearly over. Sowings of *rabi* going on slowly for want of rain, which is much needed throughout the Province. Outturn expected to be an average one. Fodder sufficient in all districts.

**Central Provinces.**—*For week ending 20th November.*—Weather cool and somewhat cloudy at end of week, with slight rain in Bilaspore. *Kharif* crops being harvested, outturn good. *Rabi* sowings still continue, and crops where sown are in good condition. Cotton being picked, outturn is good. Prices steady.

**Burma.**—(No report received.)

**Assam.**—*For week ending 20th November.*—Weather damp; slight rain in all districts. Reaping of early rice commenced. Sowing of mustard continues. Prospects of tea and other crops good.

**Mysore and Coorg.**—(No report received.)

**Berar and Hyderabad.**—*For week ending 20th November.*—Weather clear and cold in Berar. *Jowari* nearly ripe. Cotton second picking continues. *Rabi* sowing completed. Pasturage sufficient except in Chikli. Prices stationary.

No rain during week at Hyderabad. Sowing of *rabi* crops continues. *Abi* crops thriving. Prices: wheat 11½, coarse rice 9½, white *juar* 18½, yellow *juar* 21, and *tur* 16 seers per current sicca rupee.

**Central India.**—*For week ending 20th November.*—The following changes reported since last report: Prices of food grains low in West Malwa, and falling in Dhar, Barwani and Neemuch and in Goona Agency.

**Rajputana.**—*For week ending 20th November.*—Agricultural operations satisfactory. Standing crops damaged by locusts in Bundi, Kerowli and Dholepore. Agricultural stock good except in Bundi. Pasturage or fodder sufficient except in Marwar and Dholepore. Prices rising in Kerowli and steady elsewhere.

**Nepal.**—*For week ending 14th November.*—No rain. Weather fine. Wheat is being sown in the valley.

F. C. BUCK,  
*Secretary to the Government of India.*





SUPPLEMENT TO  
**The Gazette of India.**

No. 48.] CALCUTTA, SATURDAY, NOVEMBER 30, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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GOVERNMENT OF INDIA,  
REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, November 18th, 1889.**

During the week under review there has occurred a marked change in the weather over the eastern half of India. This change has been caused by a somewhat considerable depression which has moved erratically about the Bay and by two or three small subsidiary disturbances which were apparently formed over the head of the Bay and passed into Bengal, giving much heavy rain to that Province and the east of the North-Western Provinces. The effects of these disturbances, both major and minor, were confined more or less to the Bay area, though rain also fell in Travancore and the east of the North-Western Provinces. The weather in other parts of India remained fine and dry.

The chart of the 14th showed a large area of high pressure overlying North-Western and Central India, the Central Provinces and the Deccan, and a large low pressure area over the Andaman sea and the south-east of the Bay. The wind directions were normal except over the western side of the Bay, where the abnormal westing, which has been recently noticed, continued. The weather was very fine except in Burma where there was some cloud. On the 13th the barometer was rising in North-Western India and in Burma, and was falling elsewhere. The low pressure area which had formerly existed over the south-east of the Bay had apparently commenced a westerly advance—hence the fall in the Peninsula and the rise in Burma. A strong easterly wind blew at Diamond Island, but elsewhere there was little change. There had occurred an increase of dampness and of cloud round the Bay, but the weather generally remained very fine. The

chart of the 14th showed very distinctly the existence of a low pressure area over the centre of the Bay, while the winds in Bengal and Orissa pointed to the presence of small subsidiary depressions over those Provinces. The strong easterly wind at Diamond Island continued and cyclonic breezes were reported all round the Bay. Elsewhere the wind directions were generally unaltered and the weather fine. By the morning of the 15th the low pressure area over the Bay had developed into a well-marked disturbance the centre of which lay apparently at some distance to the east of Negapatam. The wind was cyclonic and the weather unsettled over the south of the Bay. In addition to this main depression, small local storms were shown in the north of the Bay or over Bengal, and the weather was equally unsettled in this region also. Elsewhere the sky was clear or nearly so. On the 16th conditions over the Bay were unchanged and the weather was very unsettled in the south and east of the Peninsula, as well as over Orissa, Bengal, Behar and Assam. The chart of the 17th showed that the storm had intensified and the weather over the south of the Peninsula and Ceylon was very unsettled with strong cyclonic winds and a very rough sea. In Bengal and over the head of the Bay, on the contrary, the weather had improved and pressure became more steady. The chart of the 18th showed that the storm had begun to move northward and that the centre lay to the eastward and a little to the north of Madras. The storm was still intensifying and was now a considerable disturbance. The weather consequently remained very unsettled all over the south of the Peninsula, while the northward movement of the disturbance had renewed the unsettled conditions over Bengal. Throughout the whole period the weather in North-Western and Central India, the Central Provinces, the Konkan and the Deccan has called for no remark, the skies having been steadily clear with a high barometer and light winds.

*Temperature.*—The changes in temperature during the week have been very interesting. At first there was a large depression of temperature, but the amount gradually decreased till on the 15th it disappeared and was replaced by an excess which lasted till the 17th, when in its turn it gave way to a fresh but slight depression. These changes were probably due to the storm over the Bay. At first when the air was dry and radiation rapid, the amount of heat radiated during the night was not counterbalanced by the amount received during the day, and the mean temperature was low, but when a large amount of water vapour was carried into the upper atmosphere by the depression, the nightly radiation was checked, and the mean temperature rose.

The following table shows the variations of the mean temperature of the present and of the past weeks from the normal average:—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
Burma	0	0
Bengal	0	—0.8
North-Western Provinces	+0.6	+2.8
Punjab	—1.2	+2.3
Bombay	—2.1	—0.8
Central Provinces	—2.1	—2.2
Guzerat and Central India	—3.8	—1.5
Sind and Rajputana	—2.5	—2.3
Madras	—3.5	—1.6
	—0.7	+1.3

This table shows a rise of temperature relatively to the average in all Provinces except Bombay and Madras.

*Rain.*—There is a large increase in the amount of rain reported this week as compared with that reported for some weeks past. The fall has, however been confined to the region affected by the storms over the Bay, the weather in all parts of the country outside that region having been as dry as during the preceding weeks.

The following is a brief description of the daily distribution:—On the 12th, slight showers were reported from Lower Burma and from Madura, and on the 13th there was no rain out of Lower Burma. On the 14th showers were received around the head of the Bay and at Sibsagar and Kindat, but none elsewhere. On the 15th a rapid extension of the rainfall area was shown, rain having continued to fall over Lower Bengal and Assam, as well as along the whole of the west coast of the Bay and over the south of the Peninsula. On the 16th the rainfall had both increased and extended, and on the 17th several heavy falls were reported from the south of the Peninsula though the amounts had decreased in Bengal. On the 18th general rain was falling in the south and east of the Peninsula and in Bengal, but the falls were generally light.

The table at the close of the summary shows that in twenty-one divisions no rainfall at all was received during the week, but that in the other divisions, where rainfall was recorded, the amount received was generally in excess of the average. This was more particularly the case in Bengal and Assam where the normal rainfall of the week was many times exceeded. The returns show a moderate deficiency in Burma and a large excess in Bengal and Assam. The east and sub-montane districts of the North-Western Provinces and Oudh, North, had a slight excess, but with these districts rain ceased and none fell over North-Western India. In the south-west coast districts rain was reported though in somewhat deficient amounts, but on the Konkan coast and inland over the Deccan and Khandeish there was no rain at all. In the central parts of the country, including the Central Provinces, Central India and Rajputana, there was no rain except in the extreme east of the Central Provinces, and Guzerat, Kattiawar and Sind were wholly without rain. In Madras the rainfall of the week was on the whole favourable, though there was rather a large deficiency in the east coast (central) district.

The list of maximum falls exhibit some rather large amounts for the time of year in Lower Bengal and Orissa. One station in Deltaic Bengal received 10, another 8½, and a third 7 inches during the week, while in Central Bengal Pubna received 8 and two other stations 6½ inches during the week. In Orissa the maximum rainfalls were about 4 inches. On the west coast of the Peninsula the largest fall was 6 inches at Alleppy. In Madras the largest falls were all reported from the south of the east coast, and varied between 5½ and 6 inches.

Province.	Division.	RAINFALL DATA FOR WEEK ENDING 18TH NOVEMBER 1889.			RAINFALL DATA FROM 15TH OCTOBER TO 18TH NOVEMBER 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, 15th Oc- tober to 18th Nov- ember.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . . .	0'22	0'24	—0'02	16'42	4'64	+254
	Lower Burma . . . . .	0'35	1'07	—0'72	6'27	5'32	+18
	Central do. . . . .	0'28	0'51	—0'23	5'52	3'55	+55
	Upper do. . . . .	0'40	?	?	3'09	?	?
	Arakan . . . . .	0'34	1'04	—0'70	5'75	5'35	+7
BENGAL AND ASSAM.	Eastern Bengal . . . . .	2'00	0'12	+1'88	6'27	3'28	+91
	Assam (Surma) . . . . .	1'84	0'09	+1'75	4'30	3'47	+24
	Do. (Brahmaputra) . . . . .	0'31	0'13	+0'18	1'24	2'05	—39
	Deltaic Bengal . . . . .	3'73	0'01	+3'72	8'44	2'79	+203
	Central do. . . . .	2'81	0	+2'81	3'67	2'33	+58
	North do. . . . .	0'32	0'03	+0'29	0'68	2'37	—71
	Orissa . . . . .	3'43	0'05	+3'38	8'87	4'58	+94
	Chutia Nagpur . . . . .	1'31	0	+1'31	2'07	1'57	+32
	Behar (South) . . . . .	0'18	0	+0'18	0'54	1'40	—61
	Do. (North) . . . . .	0'42	0	+0'42	0'42	1'25	—66
NORTH-WESTERN PROVINCES AND ODH.	North-Western Provinces (East) . . . . .	0'48	0'03	+0'45	1'23	0'82	+50
	Oadh (South) . . . . .	0	0	0	0'05	0'33	—85
	Do. (North) . . . . .	0'04	0	+0'04	0'04	0'11	—64
	North-Western Provinces (Central) . . . . .	0	0'01	—0'01	0'01	0'36	—97
	North-Western Provinces (West) . . . . .	0	0	0	0	0'03	—100
	North-Western Provinces (Submontane) . . . . .	0'10	0'03	+0'07	0'14	0'28	—50
PUNJAB.	Punjab (South) . . . . .	0	0	0	0	0'08	—100
	Do. (Central) . . . . .	0	0'02	—0'02	0	0'18	—100
	Do. (Submontane) . . . . .	0	0'02	—0'02	0	0'03	—100
	Do. (Hill Districts) . . . . .	0	0'06	—0'06	0	0'37	—100
	Do. (North-west) . . . . .	0	0'07	—0'07	0'01	0'34	—97
	Do. (West) . . . . .	0	0'01	—0'01	0	0'04	—100
BOMBAY AND MELA- BAR COAST DIS- TRICTS (MADRAS).	Malabar . . . . .	1'28	1'19	+0'01	10'30	9'14	+13
	Madras (South Central) . . . . .	0'87	1'13	—0'26	4'43	8'74	—49
	Coorg . . . . .	0'40	0'61	—0'21	11'36	7'65	+48
	Mysore . . . . .	0'12	0'43	—0'32	2'22	4'10	—46
	Konkan . . . . .	0	0'10	—0'10	4'84	1'84	+163
	Bombay Deccan . . . . .	0	0'15	—0'15	4'96	2'91	+70
	Hyderabad (North) . . . . .	0	0'10	—0'10	3'26	2'34	—46
CENTRAL PROVIN- CES AND BERAR.	Berar . . . . .	0	0'08	—0'08	3'14	1'77	+77
	Central Provinces (West) . . . . .	0	0'05	—0'05	2'95	0'89	+231
	Do. (Central) . . . . .	0	0'09	—0'09	1'72	0'76	+126
	Do. (East) . . . . .	0'11	0'05	+0'06	1'47	1'00	+47
BOMBAY (NORTH)	Guzerat . . . . .	0	0'03	—0'03	0'02	0'41	—95
	Kattiawar . . . . .	0	0'05	—0'05	0	0'22	—100
	Sind . . . . .	0	0'02	—0'02	0	0'05	—100
RAJPUTANA AND CENTRAL INDIA.	Central India (East) . . . . .	0	0'02	—0'02	0'13	0'46	—72
	Rajputana (East), Central India (West) . . . . .	0	0'02	—0'02	0	0'27	—100
	Rajputana (West) . . . . .	0	0'01	—0'01	0	0'10	—100
MADRAS.	East Coast (North) . . . . .	1'26	0'24	+1'02	7'80	6'11	+28
	Do. (North)(a) . . . . .	1'45	?	?	7'70	?	?
	Hyderabad (South) . . . . .	0'07	0'08	—0'01	2'05	1'80	+14
	Madras (Central) . . . . .	0'87	0'26	+0'61	4'00	3'49	+15
	East Coast (Central) . . . . .	0'69	1'47	—0'78	8'29	9'82	—15
	Do. (South) . . . . .	2'42	1'01	+0'81	5'04	10'21	—51
	Madras (South) . . . . .	1'08	0'79	+0'29	3'27	9'08	—64

W. L. DALLAS,

Assistant Meteorological Reporter to the  
Government of India.

CALCUTTA, 21st November, 1889.

J. W. P. MUIR-MACKENZIE,

Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 16th November.*—No rain in Cuddapah, Anantapur, South Canara, moderate in Ganjam, Madras and Tinnevely, very slight elsewhere. Standing crops generally good, but withering from want of rain in Chingleput, North Arcot, South Arcot, Tinnevely and Salem. Rain wanted in these districts and parts of Tanjore, Madura and Coimbatore, but has fallen since the close of the week in those districts where the need was greatest. Crops blighted in parts of Cuddapah and South Arcot, and oilseeds affected by worms in Bellary. Prices generally stationary or falling. Labourers employed on minor relief works 1,200. General prospects fair. Crops reviving after recent rains.

**Madras.**—*For week ending 23rd November.*—Rainfall excessive in Ganjam, good in most districts, slight in Kistna, Salem and South Canara. More rain wanted in North Arcot, Chingleput, Tanjore, Trichinopoly, Madura, Tinnevely, Coimbatore and Salem. Standing crops generally good, but withering in parts of North Arcot, Chingleput, South Arcot, Tinnevely and Salem. Some crops blighted in parts of Godaveri, Cuddapah and South Arcot, damaged by storm and floods in Ganjam, and by recent heavy rains and locusts in Bellary. Prices rising in nine districts, falling or stationary in others. 552 labourers employed on minor relief works in Ganjam. General prospects fair.

**Bombay.**—*For week ending 27th November.*—Slight rain over Karnatik. Late crops in parts of the Deccan and Karnatik require more rain. Standing crops generally good except where damaged by locusts in Sind. Cotton prospects favourable, except in parts of Broach. Harvesting and sowing operations progressing generally. Fodder generally sufficient and agricultural stock good.

**Bengal.**—*For week ending 26th November.*—The weather continued unsettled and rainy up to 22nd, since which date it has become fine all over the Province. There was a storm in Orissa on the 20th. The recent heavy rain in Orissa, South-west and East Bengal, and parts of Chota Nagpur has done some damage both to the rice and the *rabi* crops. In Behar the rainfall was moderate, and the *rabi* and poppy sowings benefited by it. Sugarcane is generally doing well. Prices of rice are said to be falling in many districts owing to the appearance of the new crop in the market. During the past week, however, the price rose in some districts on account of the rains.

**North-Western Provinces and Oudh.**—*For week ending 27th November.*—The weather and agricultural prospects generally are normal. Supplies ample and prices easy. Locusts are reported in parts of the Jhansi, Cawnpore and Bareilly districts, but the extent of the damage caused by them is not known.

**Punjab.**—*For week ending 27th November.*—No rain. Prices unsettled in Delhi, rising in Umballa and Rawalpindi, falling in Shahpur, stationary elsewhere. Harvesting of *kharif* crops nearly over; sowings of *rabi* crops still going on. Rain urgently wanted in all districts. Outturn of *kharif* crops is expected to be an average one. Fodder is reported sufficient throughout the Province.

**Central Provinces.**—*For week ending 27th November.*—Light rain in Sambalpur; elsewhere clear and cold. Young *rabi* crops in thriving condition. Cotton, rice, *juari* and other *kharif* crops are yielding good outturns. Prices steady.

**Burma.**—*For week ending 16th November.*—Rain fell in most districts in Lower Burma where the crop prospect is good. Rain fell in the Upper Chindwin, Myingyan, Magwé, Meiktila, Yamethin and Pyinmana districts of Upper Burma. Crops promise well generally, but in parts of Shwebo, Minbu, Meiktila and Yamethin the outturn will be poor. The price of paddy has fallen 10 per cent. in Prome, 5 per cent. in Bassein, but has risen 6 per cent. in Tharawady and 11 per cent. in Pyinmana; elsewhere prices are stationary.

**Burma.**—*For week ending 23rd November.*—Rain fell in Akyab, Sandoway and Bassein in Lower Burma and in every district in Upper Burma, with the exception of Sagaing, Kyaukse, Minbu, Magwé, Yamethin and Pyinmana. In parts of Prome crops are suffering for want of late rains; elsewhere in Lower Burma the prospect is good. More rain is wanted in Minbu and Meiktila; elsewhere in Upper Burma the crop prospect is satisfactory. The price of paddy has fallen in Thongwa and Henzada, but in other districts remains stationary. In Upper Burma the prices show no fluctuations. The food-supply is sufficient throughout the Province.

**Assam.**—*For week ending 27th November.*—Weather seasonable. Slight rain fell in most districts, and did some damage in Shylet and Cachar. Sowing of mustard and reaping of late rice continue. Tea and other crops generally doing well.

**Mysore and Coorg.**—*For week ending 20th November.*—Crops good, except in parts of Bangalore and Kolar districts, where more rain is wanted. Harvesting of sugarcane and transplanting of paddy continues in parts; outturn generally favourable. No material change in prices.

Slight rain in Coorg. Prospects of standing crops good.

**Mysore and Coorg.**—*For week ending 27th November.*—Rainfall slight in civil and military station and Bangalore district. More rain required for crops in Bangalore and Kolar districts. Elsewhere they are reported to be in good condition; outturn of harvest favourable. Prices slightly risen in Kolar and Kadur districts.

Slight rain in Coorg. Prospects good.

**Berar and Hyderabad.**—*For week ending 27th November.*—In Berar weather clear and cold. *Fowari* ripe and will soon be cut. Wheat, gram, linseed and *tur* in good condition. Second picking of cotton continues. Pasturage sufficient. Prices stationary.

Slight rain in Hyderabad. Total since 1st January 1370. Rainfall of week has injured to some extent the *abi* crops which are being harvested. *Rabi* sowings continue. Prices stationary.

**Central India.**—*For week ending 27th November.*—Prices of food-grains have risen slightly in Alirajpur in Bhopawar, but continue low in Barwani and elsewhere in Agency. Condition of crops good except in Sirsi. No other material changes since last report.

**Rajputana.**—*For week ending 27th November.*—Agricultural operations satisfactory. Standing crops good. Slight damage by locusts in Kotah. Agricultural stock good. Fodder dear in Marwar, elsewhere sufficient. Cotton below average in Ulwar. Prices generally steady.

**Nepal.**—*For week ending 21st November.*—No rain. Weather seasonable. Winter crops progressing.

E. C. BUCK,

*Secretary to the Government of India.*

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GOVERNMENT OF INDIA.  
HOME DEPARTMENT.  
PUBLIC.

*No. 2229, dated Calcutta the 29th November, 1889.*

THE following statement, which compares the mortality among human beings and cattle in the different provinces of British India in the years 1887 and 1888 from injuries received from wild animals and venomous snakes, and also the results of measures taken to exterminate wild animals and venomous snakes, is published for general information.

*Statement showing the results of the measures adopted in British India with the view of exterminating wild animals and venomous snakes during 1888.*

[illegible]

† Includes 5,198 licenses in force in Jalhalpur District, of which no details are given.  
 ‡ Includes 1,541 licenses granted under Form VIII of the Arms Act Rules in the Sibasagar District.  
 § Includes 6,730 licenses, of which no details are given (the remainder against Central Provinces and Assam figures).



GOVERNMENT OF INDIA  
REVENUE AND AGRICULTURAL DEPARTMENT.  
(STATISTICS.)

IMPORTS OF COTTON, INDIGO, WHEAT AND LINSEED.

*Statement showing the imports of Cotton, Indigo, Wheat and Linseed by rail and river into Bombay Town, Karachi and Calcutta during the month of August 1889.*

Articles, and whither imported.	WHENCE EXPORTED.											TOTAL.
	Madras.	Bombay.	Sindh.	Bengal.	N. W. P. and Oudh.	Punjab.	Central Provinces.	Berar.	Assam.	Rajputana and Central India.	Nizam's Territory.	
<b>Cotton—</b>												
Bombay Town	Mds. 5,545	Mds. 43,261	Mds. ...	Mds. ...	Mds. 4,574	Mds. 1,966	Mds. 607	Mds. 1,423	Mds. ...	Mds. 8,086	Mds. 12,682	Mds. 78,114
Karachi	...	...	...	...	...	117	...	...	...	...	...	3,010
Calcutta	...	...	...	3,713	6,705	629	...	...	221	...	...	11,268
<b>TOTAL</b>	5,545	43,261	2,923	3,713	11,279	2,712	607	1,423	221	8,086	12,682	92,452
<b>Indigo—</b>												
Calcutta	...	...	...	19	...	...	...	...	...	...	...	19
<b>TOTAL</b>	...	...	...	19	...	...	...	...	...	...	...	19
<b>Wheat—</b>												
Bombay Town	...	50,171	...	...	39,423	88,104	1,26,157	5,872	...	20,039	23	1,20,879
Karachi	...	...	3,50,270	...	...	8,17,956	...	...	...	...	...	11,63,226
Calcutta	...	...	...	1,93,211	75,565	28,287	8,797	...	...	...	...	3,05,800
<b>TOTAL</b>	...	50,171	3,50,270	1,93,211	1,14,988	9,34,437	1,34,954	5,872	...	20,039	23	18,03,965
<b>Linseed—</b>												
Bombay Town	835	27,237	...	...	14,655	516	28,564	35,251	...	6,117	8,649	1,21,894
Karachi	...	...	17	...	...	1,704	...	...	...	...	...	1,813
Calcutta	...	...	...	5,79,749	1,60,631	1,138	...	...	911	299	...	7,42,728
<b>TOTAL</b>	835	27,237	17	5,79,749	1,75,288	3,478	28,564	35,251	911	6,446	8,649	8,66,425
	6,380	1,20,069	3,03,210	7,76,692	3,01,555	9,40,627	1,64,123	42,546	1,132	34,571	21,334	27,62,861

\* The imports into Bombay Town and Karachi are not returned.

DEPT. OF REVENUE AND AGRICULTURE,  
Simla, the 18th November, 1889.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXXI of 1889-90.

**APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.**

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 3RD NOVEMBER, 1888.			WEEK ENDING 2ND NOVEMBER, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 3RD NOVEMBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 2ND NOVEMBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.
		Total length open.	RECEIPTS.		Total length open.	RECEIPTS.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
	<i>State Lines worked by Companies</i>		M	R		R	R	R	R	R	R		
9th Nov., 1889	East Indian	1,514	10,13,968	670	1,526	(a) 7,76,203	509	2,48,75,919	530	(a) 2,48,61,847	526	...	14,972
9th ditto	Patna-Gya	57	9,525	167	57	8,206	144	2,90,225	167	2,75,569	155	...	20,656
...	Dildarnagar-Ghaziipur	12	579	48	...	(b)	...	39,316	106	(b)	...	...	39,316
...	Sindia	75	7,373	98	...	(c)	...	2,11,112	91	(c)	...	...	2,11,112
9th Nov., 1889	Rajputana-Malwa	1,664	3,46,217	208	1,672	3,20,000	197	1,05,57,434	205	1,10,07,039	215	5,00,605	...
9th ditto	Hengal-Nagpur (d)	183	20,379	111	305	(e) 34,404	113	8,42,291	146	(e) 10,16,326	109	1,73,635	...
9th ditto	Southern Mahratta (f)	854	83,478	98	978	63,537	65	23,14,729	87	23,60,616	87	45,887	...
9th ditto	Ditto Mysore Section	140	8,863	63	296	24,105	81	3,51,190	81	5,30,733	70	1,88,543	...
9th ditto	Indian Midland	136	11,669	86	746	(g) 26,043	85	3,98,334	96	(g) 16,48,805	79	12,50,471	...
9th ditto	Villupuram-Guntakal, Neilore Branch	83	3,826	46	83	4,587	55	1,48,226	58	1,46,781	57	...	1,445
9th ditto	Bareilly-Pilibhit	36	1,812	50	36	2,350	65	46,821	43	58,062	54	11,241	...
	TOTAL	4,754	15,07,689	317	5,699	13,05,525	229	4,00,81,597	272	4,19,74,678	249	18,93,081	...
	<i>State Lines worked by Government.</i>												
9th Nov., 1889	North-Western (h)	2,469	5,15,451	209	2,478	5,98,775	242	1,48,25,329	194	1,61,86,870	212	13,61,541	...
9th ditto	Oudh and Rohilkhand	694	1,30,096	188	692	1,41,454	204	3,15,040	184	43,77,086	204	4,27,045	...
9th ditto	Bengal Central	125	15,135	121	125	13,370	111	4,34,306	111	4,47,598	116	16,292	...
9th ditto	Wardha Coal	45	17,986	400	45	13,889	309	4,41,933	317	4,53,247	327	11,314	...
9th ditto	Eastern Bengal	673	2,66,586	396	747	2,78,550	373	61,01,325	295	62,80,550	284	1,25,225	...
9th ditto	Nalhati	27	1,358	50	27	1,351	50	59,024	71	56,292	68	...	2,732
9th ditto	Tirhoot	273	34,446	126	273	31,090	114	9,48,300	121	10,86,291	133	1,37,431	...
9th ditto	Lucknow-Sitapur-Sihramau	105	4,198	40	105	6,084	58	1,48,196	46	1,84,863	57	36,667	...
9th ditto	Jorhat	23	922	37	23	855	34	36,682	47	37,335	48	653	...
9th ditto	Cherra-Companyganj	7	264	38	7	333	48	4,303	20	5,368	25	1,065	...
9th ditto	Burma (i)	392	62,990	161	353	99,516	180	17,05,329	148	26,69,906	162	9,64,577	...
	TOTAL	4,833	10,49,442	317	5,077	11,85,760	234	2,87,12,927	192	3,17,92,006	204	30,79,079	...
	<i>Lines worked by Guaranteed Companies</i>												
9th Nov., 1889	Madras	840	1,33,601	159	840	1,21,011	204	50,40,664	194	54,80,537	212	4,48,873	...
9th ditto	South Indian	654	90,445	138	654	97,827	150	33,14,316	163	34,44,039	171	1,34,823	...
2nd ditto	Great Indian Peninsula	1,504	(j) 5,81,937	387	1,447	(k) 5,79,832	401	(j) 2,37,59,780	510	(k) 1,82,53,750	409	...	55,06,030
9th ditto	Bombay, Baroda and Central India (l)	461	2,29,154	497	461	2,14,000	454	71,66,069	501	72,91,971	513	1,25,902	...
	TOTAL	3,459	10,35,137	299	3,402	10,62,670	312	3,94,80,729	366	3,44,84,297	328	...	47,06,432
GRAND TOTAL (GUARANTEED AND STATE)		13,046	35,92,268	275	14,178	35,53,964	251	10,80,75,253	268	10,82,50,981	252	1,75,728	...
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	5,63,59,593	140	5,65,29,604	132	1,70,012	...
NET RECEIPTS		...	...	...	...	...	...	5,17,15,660	128	5,17,21,376	120	5,716	...
	<i>Assisted Companies</i>												
9th Nov., 1889	Tarakeshwar	22	7,618	345	22	5,759	239	2,67,155	245	3,64,285	241	...	3,870
2nd ditto	Dibru-Sadiya	78	8,060	103	78	8,113	104	2,66,257	110	2,87,308	119	21,111	...
9th ditto	Bengal and North-Western	376	27,945	74	376	33,080	88	13,44,614	115	13,94,434	120	49,820	...
9th ditto	Rohilkhand-Kumaun	67	10,185	152	67	12,060	180	2,20,298	110	2,37,338	118	17,040	...
	TOTAL	543	53,808	99	543	58,521	108	19,98,324	119	20,82,425	124	84,101	...
	<i>Native States.</i>												
9th Nov., 1889	His Highness the Nizam's Guaranteed	310	45,456	147	354	43,412	123	9,22,581	108	13,26,424	121	3,45,843	...
9th ditto	His Highness the Gackwar's	59	2,109	36	59	1,820	31	76,815	42	77,099	42	284	...
9th ditto	His Highness the Gackwar's Virangam	21	674	32	27	700	26	26,839	41	31,032	37	4,143	...
9th ditto	Mehsana-Vadnagar	209	14,353	71	329	17,890	54	5,86,584	66	7,51,559	90	1,64,975	...
9th ditto	Bhavanagar-Gondal	68	2,980	44	68	2,826	49	1,03,097	49	1,13,592	54	9,595	...
9th ditto	Junagarh-Porbandar	124	5,448	44	124	6,500	52	2,06,689	54	2,00,585	52	...	6,074
9th ditto	Morvi	...	...	...	...	...	...	...	...	...	...	...	...
9th ditto	Jodhpore	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	791	71,322	90	961	73,148	76	19,83,525	84	25,02,291	90	5,18,766	...

(a) Includes the Dildarnagar-Ghaziipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Katni-Umaria Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kistna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(i) Includes the Toungoo-Mandalay extension.

(j) Includes the Dhond-Munmad, Khangaon, Amraoti and Bhopal-Itarsi State Railways.

(k) Includes the Dhond-Munmad, Khangaon and Amraoti State Railways.

(l) Includes the Patni Branch.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

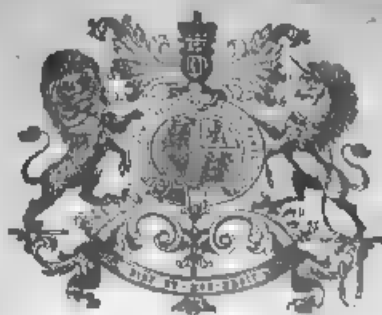
CALCUTTA,

The 28th November, 1889.

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SUPPLEMENT TO  
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OFFICIAL PAPERS.

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weather Summary for October 1889.

The month of October usually witnesses the completion of the south-west monsoon withdrawal which is commenced in the preceding month. Under normal conditions moist monsoon winds are still felt in Bengal, &c., at the beginning of October, but about the middle of the month dry winds from north-west and north-east, which have already commenced in Upper India, spread over Bengal and the head of the Bay, and occasion the south-west monsoon current to curve to the westward and finally to the south-westward over the centre of the Bay. This current then reaches the Coromandel coast as a north-easterly wind after a long journey over the Bay. During this journey its already large supply of moisture has been augmented by evaporation from the Bay, and hence the very heavy rain which usually accompanies its first appearance on the Madras coast. The recurving of the monsoon current and the extension of dry north-westerly winds from Upper India to Bengal are accompanied by a considerable change of weather. In the first place, cold weather conditions extend quickly over the whole of Northern India; in the second, the low pressure area, and consequently the area of probable disturbance over the Bay, is moved southward, and the trajectory of the storms is changed from west-north-west across the Orissa coast to west across the Peninsula. In the third place, the Carnatic becomes the seat of heavy and continued rainfall.

The western side of the Peninsula experiences perhaps less change of weather than other parts of the Indian region, as the wind remains westerly and rain falls moderately frequently.

During the month just passed this regularity of change has been less marked than is normally the case. At first conditions were apparently progressing satisfactorily. The low pressure area moved southward down the Bay, and about the 14th a well-marked depression which was seemingly determining the

commencement of the north-east monsoon was reported from the Madras coast. The vitality and course (subsequently given) of this storm were, however, in a high degree inimical to the development of the particular conditions with which are associated a satisfactory north-east monsoon and good rains on the Coromandel coast, and the second half of October which ordinarily sees almost daily rainfall in the Carnatic was marked this year by an almost complete absence of rain from all Madras coast stations south of Masulipatam.

**Pressure.**—The barometric abnormals of the month showed that pressure was below the normal average over a large area, which included roughly Oudh, the east of the North-West and Central Provinces, the Eastern Deccan, the Circars, the west and north of the Bay, the whole of the Province of Bengal, Assam and part of Arrakan. Over the whole of this region there was a deficiency of pressure, the point of greatest depression lying over the north-west of the Bay and off the Orissa coast. On all sides of the area of deficient pressure the barometer exceeded the normal, the greatest excess being reported from the stations of Jacobabad, Ratnagiri, Cochin, Colombo and Moulmein.

**Temperature.**—The temperature conditions during a large part of the past month have been very unusual. The first indication of the abnormal lowness which has prevailed was, if the Quetta observations be correct, given in Baluchistan, where both the day and night temperatures showed an unusual coolness, quite at the commencement of the month. Subsequently very low night temperatures were reported from Upper and Central India, but the day temperatures were unaffected until about the 13th, when both the maximum and minimum temperatures fell below the normal average. The remarkable depression of temperature which subsequently set in lasted over nearly the whole of India until almost the close of the month, and during its continuance lower night temperatures were recorded at several stations than any previously registered in October. The following table shows the variation of the mean temperature for each week and for the month from the normal mean:—

PROVINCE.	DIFFERENCE OF MEAN TEMPERATURE FROM NORMAL FOR WEEK ENDING OCTOBER				Difference of mean temperature from the normal for the month.
	7th.	14th.	21st.	28th.	
Burma . . . . .	—0·8	+0·9	+0·5	—0·6	—0·1
Bengal . . . . .	+1·0	+0·9	—0·2	+1·6	+0·7
North-Western Provinces . . . . .	+0·6	+0·7	—2·6	—1·1	—0·4
Punjab . . . . .	—0·6	—1·5	—4·7	—3·1	—2·0
Bombay . . . . .	—0·1	+0·9	—0·5	—4·3	—1·3
Central Provinces and Berar . . . . .	+0·6	+0·9	+0·3	—4·3	—0·8
Guzerat and Central India . . . . .	+1·3	+0·8	—1·3	—5·4	—1·3
Sind and Rajputana . . . . .	—0·4	—1·0	—4·2	—5·1	—2·6
Madras . . . . .	—0·4	+0·2	—0·7	—1·1	—0·3

**Barometric depressions and cyclonic storms of the month.**—There were four depressions during the month, of which only that formed over the Bay between the 13th and 15th of October and which subsequently passed over the Peninsula and Central Provinces, was of any importance.

1. *Shallow depression of the 3rd to the 6th October.*—A very shallow depression formed over the north-west of the Bay on the 3rd, when rain was falling at Saugor Island and at the Orissa and Circars coast stations. The disturbance subsequently moved southward and developed somewhat, and the rainfall became heavier on the Orissa and North Madras coast districts, but the disturbance was unaccompanied by any definite cyclonic movements of the winds. On the 5th the disturbance had become much smaller, and on the 6th it had practically disappeared.

2. *Small depression of the 5th to 7th October.*—The chart of the 5th showed a small shallow depression near Karwar. This depression subsequently

passed northward along the Bombay coast, reaching Bombay on the 6th and probably Kattiawar on the 8th. It occasioned unsettled weather on the North Konkan coast and a strong south-east wind.

3. *Important depression of 13th to 22nd of October.*—On the 13th there was a slight tendency to the formation of a depression in the Bay of Bengal off the Coromandel coast. On the 14th the storm had developed a good deal, and the centre lay off the coast between Madras and Nellore. During the 24 hours succeeding 8 A. M. on the 14th the depression apparently underwent no change either in position or character, but during the 15th the centre crossed the coast, and by 8 A. M. on the 16th was advancing west-north-westward towards the Bellary and Cuddapah districts. The storm already showed signs of intensifying and the pressure at Madras was  $\frac{1}{4}$  of an inch below the normal. By 8 A. M. on the 17th the storm centre had reached the neighbourhood of Belgaum, where the barometer read nearly  $3''$  below the normal average. Strongish cyclonic winds prevailed over the Peninsula, and near the storm centre the force of the wind was high and rising. During the next 24 hours, *vis.*, from 8 A. M. 17th to 8 A. M. 18th, the storm centre moved very slowly northward passing over Belgaum, but travelling only to a slight distance to the north-westward of that station. Cyclonic winds consequently still circulated around this centre, the force being strong to a gale. The chart of the 19th showed that the storm had begun to fill up, and that it had moved north-eastward to the neighbourhood of Sholapur. Strong cyclonic winds continued over the Peninsula. The next day's chart showed that the storm had continued to advance in a north-easterly or east north-easterly direction, and had continued to fill up. By the morning of the 21st the centre was near Raipur, and by the morning of the 22nd the storm had either filled up or become merged in a fresh depression which then covered the north of the Bay.

The disturbance, the course of which has just been traced, was an exceedingly influential one, and one which directly or indirectly has exercised an important influence on the weather. Its primary effect was to produce conditions favourable to rainfall on the Madras coast, but its subsequent course was such as to produce dry south-westerly and westerly winds over the Carnatic, so that instead of the normal rains fine weather was experienced.

(4) *Small depression of the 22nd to the 27th October.*—On the 22nd a large shallow area of deficient pressure was shewn over the head of the Bay, the Circars, Orissa, and Arrakan. By the morning of the 23rd, the depression had increased, and a squally cyclonic circulation prevailed at the head of the Bay. During the next 24 hours there was very little change, but by 8 A. M. on the 25th the storm had become slightly deeper and had commenced an easterly movement across the head of the Bay. The chart of the 26th showed very little change, but by the 27th, the centre of the storm had reached South-East Bengal, and a squally cyclonic circulation of the winds prevailed. The storm subsequently broke up in East Bengal and Assam.

*Rainfall.*—The above remarks show that the Bay area, the Peninsula, the Central Provinces, and Bengal, were affected by fairly numerous depressions of fair intensity, but that North-Western India lay beyond the scope of their action. The rainfall of the month agrees with this distribution of atmospheric disturbance; North-Western India and the Gangetic plain, including the Punjab, the North-Western Provinces, Behar, Rajputana, Sind, and Cutch, reporting little or no rain, while all the other provinces show good or excessive rains.

During the first week of the month the rainfall was excessive over the west coast districts, over a large part of the Central Provinces, and in the north of Madras, but was deficient over the greater part of India. In North-Western India there was no rain. The second week of the month showed very similar conditions. The storm of the third week hardly altered the relative distribution of rainfall, but intensified the excess over the Peninsula, and the central parts of

the country. The following table shows some of the amounts which were received over the peninsula during the progress of this storm :—

Station.	District.	Amount, inches.
Vayitri . . . . .	Calicut . . . . .	23
Karkal . . . . .	South Kanara . . . . .	16½
Gudapur . . . . .	Nilgris . . . . .	10½
Verogendrapet . . . . .	Coorg . . . . .	11
Kumpta . . . . .	North Kanara . . . . .	15
Yellamanchilli . . . . .	Vizagapatam . . . . .	12
Narsapur . . . . .	Godavery . . . . .	13½
Repalli . . . . .	Kistna . . . . .	12½
Ongoli . . . . .	Nellore . . . . .	10½
Ponnery . . . . .	Chingleput . . . . .	13½

In the fourth week the area over which the weather was exceptionally fine increased, and the only regions showing any important excess were Burma, Bengal and the Central Provinces. In the two former regions this excess was occasioned by the storm which formed over the head of the Bay and passed into East Bengal, and the largest amounts received were as follows :—

Station.	District.	Amount.
Maungdaw . . . . .	Akyab . . . . .	7½
Kushak . . . . .	Tipperah . . . . .	11
Perozepore . . . . .	Backergunj . . . . .	12
Munshigunj . . . . .	Dacca . . . . .	8
Bagirhat . . . . .	Khoolna . . . . .	9½
Madaripur . . . . .	Faridpur . . . . .	7½
Bashirhat . . . . .	24-Pergunnahs . . . . .	11½
Gope . . . . .	Pooree . . . . .	12½

The following table gives complete data, and shows the actual average rainfall and the normal rainfall of the month of the 21 districts into which the country is divided, so far as it is indicated by the telegraphic reports of a few stations in each district.

DISTRICTS.	Number of Stations.	Normal Average Rainfall in October.	Actual Average Rainfall in October 1889.	Difference from the Average in October 1889.
Punjab, West . . . . .	7	0·32	0	—0·32
"    East . . . . .	4	0·40	0	—0·40
North-Western Provinces, Trans-Gangetic . . . . .	8	1·35	0·02	—1·33
North-Western Provinces, Cis-Gangetic . . . . .	3	0·96	0·32	—0·64
Behar . . . . .	2	2·75	0·58	—2·17
North Bengal . . . . .	3	4·11	1·55	—2·56
Assam—Cachar . . . . .	3	4·49	3·67	—0·82
Lower Bengal and Chutia Nagpur . . . . .	8	4·53	5·19	+0·66
Orissa—North Circars . . . . .	5	8·43	12·48	+4·05
Central Provinces, South . . . . .	7	2·35	2·61	+0·26
Berar—Khandeish . . . . .	2	3·29	3·48	+0·19
Rajputana, Central India, Saugor and Nerbudda . . . . .	9	1·04	0·71	—0·33
Sind—Cutch . . . . .	3	0	0	0
Guzerat . . . . .	3	0·85	1·20	+0·35
Konkan . . . . .	4	3·93	5·40	+1·47
Deccan—Hyderabad . . . . .	5	4·33	6·27	+1·94
Malabar . . . . .	5	9·53	11·56	+2·03
Mysore—Bellary . . . . .	4	7·63	7·57	—0·06
Carnatic . . . . .	6	8·05	6·19	—1·86
Lower Burma . . . . .	7	7·72	8·45	+0·73
Ceylon . . . . .	1	12·09	14·99	+2·90

W. L. DALLAS,  
for Meteorological Reporter to the Govt. of India.

SIMLA ;  
The 25th November 1889.



GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending 8 a.m. on  
Monday, November 25th, 1889.**

Very unsettled and abnormal weather has prevailed over the eastern half of the Indian region during the week under review. The cyclonic storm, which was noticed off the Madras coast at the close of the previous week, advanced slowly up the Bay, hugging the west coast, during the present week. A cyclonic circulation of strongish winds prevailed around it. The winds to the southward of the centre blowing across India were dry, and hence the weather over the Carnatic, though cloudy, was fair, but those to the northward of the centre coming from a sea area, reached the coast heavily laden with moisture and gave torrential rains to large tracts of country. After the dispersion of the depression the weather throughout the Bay area and over the south of the Peninsula remained for a day or two in a showery and slightly unsettled state, but pressure eventually assumed the distribution it had prior to the appearance of the storm described above and fair to fine weather prevailed throughout the Indian region.

The chart of the 19th showed that the storm, the centre of which on the 18th lay off the coast between Madras and Nellore, had advanced slowly on a north-north-east course, and that the centre of disturbance lay to the east of Vizagapatam, where the barometer marked 29.596" and showed a deficiency, compared with the normal average, of three and a half tenths of an inch. The highest pressure reported (excluding Ajmere, where the pressure is doubtful) on this day was 30.030" at Jeypore, so that there existed a difference of 0.434" over India, which is unusually large at this season. Strong cyclonic winds prevailed around the storm area, and the winds over the greater part of the Indian region were more or less affected by the disturbance. A slight northerly gale was reported from Gopalpore and fresh winds from Saugor Island, Raipur, Bombay, and Colombo. By the morning of the 20th, the storm centre lay midway between Vizagapatam and Gopalpore, and apparently just off the coast. The lowest reading reported on this day was slightly higher than the lowest on the preceding day, but the general intensity of the disturbance was unaltered. A severe easterly gale had prevailed at Gopalpore, where the velocity during the afternoon and night of the 19th had averaged 60 to 66 miles per hour. Strong cyclonic winds prevailed all round the Bay, and gales were reported from some central stations. On the morning of the 21st there was still a good deal of irregular cyclonic circulation around the head of the Bay and a shallow low pressure area over the Bay, but the storm had to a great extent broken up and the winds had fallen much lighter. The chart of the 22nd showed that the barometer was rising in nearly all parts of the Indian region. The rise was apparently greater over the Bay than elsewhere, so that the barometric gradient had decreased and the wind, except at one or two stations, had fallen light. Around the Bay an irregular cyclonic movement still continued. On the morning of the 23rd the barometer was still rising almost everywhere, and pressure continued to advance in the direction of general uniformity. Steady north-easterly winds prevailed over the Central Provinces and on the west coast of the Peninsula, but elsewhere the directions were very variable and numerous calms were reported from Northern India. The charts of the 24th and 25th showed small barometric changes and very settled conditions. Pressure was lowest over the Bay and highest over North-Western India, but the difference was small and the winds were light. There was an abnormal amount of westing in the wind directions along the west coast of the Bay, but elsewhere the directions were fairly normal.

*Temperature.*—In Bengal, the North-Western Provinces, the Central Provinces, and Madras, the weather has been abnormally warm throughout the week. In the other Provinces the first three or four days of the week were cool, the amount of the coolness gradually decreasing, till after the middle of the week the deficiency of temperature disappeared, and was replaced by a slight excess.

The following table shows the variations of the mean temperature of the present and of the past week from the normal average :—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
	°	°
Burma . . . . .	—0·8	—0·3
Bengal . . . . .	+2·8	+2·7
North-Western Provinces . . . . .	+2·3	+2·3
Punjab . . . . .	—0·8	—0·7
Bombay . . . . .	—2·2	—1·2
Central Provinces . . . . .	—1·5	+1·4
Guzerat and Central India . . . . .	—2·3	—0·6
Sind and Rajputana . . . . .	—1·6	—0·6
Madras . . . . .	+1·3	+1·4

This table shows that the mean temperature compared with the normal of the time of year is rising except in Bengal and the North-Western Provinces, where it is stationary. The greatest excess over the normal is in Bengal, where the cloudy state of the sky has prevented free radiation and produced high night temperatures.

*Rain.*—As mentioned above, the Bay area has been the seat of unsettled weather, and the Bay and its neighbourhood, except Burma and the Carnatic, have received more than their normal amount of rain. The greatest excess is reported from the North Circars and Orissa, where the easterly gales, prevailing to the northward of the storm which travelled up the Bay, brought up abnormally heavy rain. In Orissa the rainfall of the week exceeded forty-fourfold the small amount which is normally received during this week.

The daily distribution of rainfall was as follows :—On the 19th rain had fallen generally in Ceylon and the south of the Peninsula; one or two local showers had occurred on the east side of the Peninsula and general showers had fallen in Bengal. On the 20th rain had ceased in the south of the Peninsula, but slight showers had occurred on the Circars coast, very heavy rain over Orissa and Ganjam and moderately heavy rain over the head of the Bay. Slight showers were again reported from a few places in Bengal. On the 21st heavyish rain was falling in Orissa and at some places in Lower Bengal, but elsewhere any rainfall was light and scattered. The chart of the 22nd showed that the only heavy rain had occurred at Diamond Island, but that showers had fallen in Upper Burma, Assam, Lower Bengal, and at several stations in the east and south of the Peninsula. By the morning of the 23rd rain had ceased to the north of the Bay, but scattered showers had fallen at several places in the Peninsula. The rainfall of the 24th and 25th was very slight and scattered.

The table at the close of the summary shows that the regions of excessive rainfall are, Arrakan, Cachar, Eastern and Lower Bengal, Orissa, Chota Nagpur, the Circars, Madras Central, and Hyderabad South, and to a limited extent Malabar. In all other parts of the Indian region the rainfall of the week has been deficient and over the whole of the Gangetic plain, Upper India, Sind, Central India, the Central Provinces, and the Konkan, there has been no rain. The east of the Central Provinces participated in the heavy rainfall of the east of the Peninsula and Malabar had a small local excess of half a tenth of an inch.

In the Carnatic the rainfall continues largely deficient, the east coast central division has received little more than  $\frac{1}{4}$ , the east coast south division little more than  $\frac{1}{4}$ , and Madras south division little more than  $\frac{1}{3}$  of the normal amount.

In Burma the only rainfall was in Arrakan and the Upper Provinces.

The maximum falls reported in Bengal, Orissa and the Circars are interesting. The largest are in Orissa and Ganjam, where Sompot received  $20\frac{1}{2}$  inches, Pooree 13 inches, Cuttack 8 inches, Banki 5 inches, and Balasore  $3\frac{1}{2}$  inches during the week. Next after these are the falls in Eastern and Deltaic Bengal of which the most important are :—3 inches at Jessore and between 2 and  $2\frac{1}{2}$  inches at Bhola (Backergunj), Munshigunj (Dacca), and Contai (Midnapur). Heavyish rainfall connected with this disturbance apparently extended westward as far as the Sambalpur division of the Central Provinces, where Raigarh received  $1\frac{1}{2}$  inch.

**SUPPLEMENT TO THE GAZETTE OF INDIA, DECEMBER 7, 1889. 1327**

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING 25TH NOVEMBER 1889			RAINFALL DATA FROM OCTOBER 15TH TO 25TH NOVEMBER 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, October 15th to 25th Nov- ember.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . . .	0	0'24	-0'24	16'42	4'88	+236
	Lower Burma . . . . .	0	0'36	-0'36	7'12	5'67	+26
	Central do. . . . .	0	0'36	-0'36	6'06	3'90	+55
	Upper do. . . . .	0'16	?	?	3'44	?	?
	Arakan . . . . .	1'09	0	+1'09	7'39	5'35	+38
BENGAL AND ASSAM	Eastern Bengal . . . . .	1'06	0'23	+0'83	7'33	3'51	+109
	Assam (Surma) . . . . .	0'23	0'01	+0'22	4'53	3'48	+30
	Do. (Brahmaputra) . . . . .	0'02	0'21	-0'19	1'26	2'26	-44
	Deltaic Bengal . . . . .	1'08	0'03	+1'05	9'52	2'81	+239
	Central do. . . . .	0'36	0	+0'36	3'74	2'39	+56
	North do. . . . .	0'01	0'01	0	0'69	2'38	-71
	Orissa . . . . .	6'57	0'15	+6'42	15'44	4'73	+226
	Chutia Nagpur . . . . .	0'54	0'01	+0'53	2'99	1'57	+90
	Behar (South) . . . . .	0	0'01	-0'01	0'54	1'42	-62
	Do. (North) . . . . .	0	0'01	-0'01	0'42	1'26	-67
NORTH-WESTERN PROVINCES AND ODDH.	North-Western Provinces (East) . . . . .	0	0'06	-0'06	1'23	0'88	+40
	Oudh (South) . . . . .	0	0	0	0'05	0'33	-85
	Do. (North) . . . . .	0	0	0	0'04	0'11	-64
	North-Western Provinces (Central) . . . . .	0	0'02	-0'02	0'01	0'38	-97
	North-Western Provinces (West) . . . . .	0	0'01	-0'01	0	0'05	-100
	North-Western Provinces (Sub-montane) . . . . .	0	0'03	-0'03	0'14	0'31	-55
PUNJAB	Punjab (South) . . . . .	0	0'02	-0'02	0	0'10	-100
	Do. (Central) . . . . .	0	0'02	-0'02	0	0'20	-100
	Do. (Sub-montane) . . . . .	0	0'06	-0'06	0	0'59	-100
	Do. (Hill Districts) . . . . .	0	0'08	-0'08	0	0'45	-100
	Do. (North-West) . . . . .	0	0'23	-0'23	0'01	0'57	-98
	Do. (West) . . . . .	0	0'11	-0'11	0	0'15	-100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar . . . . .	0'44	0'39	+0'05	10'68	9'45	+13
	Madras (South Central) . . . . .	0'27	0'75	-0'48	4'74	9'49	-50
	Coorg . . . . .	0'18	0'40	-0'22	11'54	8'05	+43
	Mysore . . . . .	0'30	0'38	-0'09	2'07	3'66	-44
	Konkan . . . . .	0	0'07	-0'07	4'84	1'91	+153
	Bombay-Deccan . . . . .	0'11	0'20	-0'09	5'08	3'11	+63
	Hyderabad (North) . . . . .	0	0'18	-0'18	1'26	2'52	-50
	Khandeish . . . . .	0	0'18	-0'18	1'26	2'52	-50
CENTRAL PROVIN- CES AND BERAR.	Berar . . . . .	0	0'16	-0'16	3'14	1'94	+62
	Central Provinces (West) . . . . .	0	0'10	-0'10	2'95	0'98	+201
	Do. (Central) . . . . .	0	0'09	-0'09	1'72	0'84	+102
	Do. (East) . . . . .	0'51	0'04	+0'47	2'97	1'04	+89
BOMBAY (NORTH)	Guzerat . . . . .	0	0'04	-0'04	0'02	0'45	-96
	Kattiawar . . . . .	0	0'02	-0'02	0	0'24	-100
	Sind . . . . .	0	0'02	-0'02	0	0'07	-100
RAJPUTANA AND CENTRAL INDIA.	Central India (East) . . . . .	0	0'06	-0'06	0'13	0'52	-75
	Rajputana (East), Central India (West) . . . . .	0	0'02	-0'02	0	0'28	-100
	Rajputana (West) . . . . .	0	0'01	-0'01	0	0'11	-100
	East Coast (North) . . . . .	4'47	1'01	+3'46	12'36	7'13	+72
MADRAS	Do. (North) (a) . . . . .	1'20	?	?	8'90	?	?
	Hyderabad (South) . . . . .	0'41	0'07	+0'34	2'46	1'87	+31
	Madras (Central) . . . . .	0'55	0'40	+0'15	4'56	3'89	+17
	East Coast (Central) . . . . .	0'41	1'51	-1'10	8'70	11'33	-23
	Do. (South) . . . . .	0'39	1'95	-1'66	5'33	12'10	-56
	Madras (South) . . . . .	0'24	0'69	-0'45	3'51	9'77	-64

W. L. DALLAS,

SIMLA, 28th November, 1889.

*Assistant Meteorological Reporter to the  
Government of India.*

E. C. BUCK,

*Secretary to the Government of India.*

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

### Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 30th November.*—No rain in Ganjam, Madras, and Trichinopoly, moderate in Vizagapatam and Nilgiris; slight elsewhere. Rain greatly wanted in Nellore, Chingleput, North Arcot, South Arcot, Tanjore, Trichinopoly, Madura, Tinnevely, Coimbatore and Salem where standing crops are withering. Crops generally good in other districts. Paddy affected by disease in parts of Godavery, Cuddapah, South Arcot, and Tinnevely. Prices generally rising or stationary. 229 labourers employed on minor relief works in Ganjam. Prospects generally favourable except in Chingleput and North Arcot where failure of crops is apprehended over considerable areas unless early rain falls.

**Bombay.**—*For week ending 4th December.*—Slight rain in parts of Karnatak; more needed for late crops in several districts. Standing crops in a few places damaged by locusts or disease, otherwise generally good. Cotton prospects favourable except in parts of Broach. Harvesting and sowing operations generally progressing. Opium sowing commenced in Baroda. Fodder generally sufficient and agricultural stock healthy.

**Bengal.**—*For week ending 3rd December.*—No rain during the week. The fine weather was favourable to all crops. Not much damage is said to have been done to the crops by the recent heavy rain. In Orissa, where there was a storm and the rainfall was exceptionally heavy, the loss of the rice crop is estimated at from two to four annas, and, in Cuttack, that of the *rabi* crops at about eight annas. The *rabi* crops are being re-sown in some districts. Harvesting of rice is proceeding, and a fair average outturn is expected in most districts. The *rabi* and poppy crops throughout Behar are favourably reported of. Tobacco is a promising crop, as also *ganja* in the Rajshahye district. Sugarcane is doing well. Prices of rice are steadily falling in the Behar districts generally, and a slight decline is also reported from some other districts.

**North-Western Provinces and Oudh.**—*For week ending 4th December.*—Cold, dry weather with occasional clouds. Agricultural prospects generally favourable. Poppy sowings progressing. *Rabi* being irrigated. Locusts are again reported in pargana Jhansi and they have appeared also in four parganas of Cawnpore and one of the Banda District. Markets are well supplied and except in Benares, where a smart rise is reported, prices are steady.

**Punjab.**—*For week ending 4th December.*—No rain. Prices rising in Rawalpindi, falling in Multan, stationary elsewhere. Harvesting of *kharif* crops nearly over. Cotton being picked and sugarcane pressed in Sialkot. *Rabi* sowings still going on. Rain badly wanted for *rabi* sowings in all districts. Prospects of standing crops are average. Outturn of *kharif* is reported below average in Amballa. Fodder sufficient throughout the province.

**Central Provinces.**—*For week ending 4th December.*—Weather clear and cold. *Kharif* harvestings continue, outturn good. Wheat and other *rabi* crops in good condition, but a little rain is now required for them in some places. Prices steady.

**Burma.**—*For week ending 30th November.*—There was a little rain in Rangoon and Tavoy but nowhere else in Lower Burma. A little rain fell in several districts in Upper Burma. In Lower Burma the crop prospect is good. The crop will be short in three districts in Upper Burma, elsewhere the pros-

pect is generally good. The price of paddy has fallen in eight districts, in one prices have risen considerably, elsewhere no change is reported.

**Assam.**—*For week ending 4th December.*—Weather seasonable. Harvesting of winter paddy continues. Sowing of mustard nearly finished. Prospects of tea good.

**Mysore and Coorg.**—*For week ending December.*—Slight rain reported in parts of the Mysore State. Crops good except in parts of the Bangalore and Kolar districts where more rain is still wanted. Harvesting continues in parts. Prospects generally favourable. Prices slightly fallen in the Kadur district.

Standing crops doing well in Coorg. Prices stationary.

**Berar and Hyderabad.**—*For week ending 4th December.*—In Berar the weather is clear and cold. Picking of cotton continues. *Jowari* ripening and will soon be cut. *Kabi* in good condition. Cutting of sesamum commenced in some places. Prices almost stationary. Fodder sufficient.

No rain during week at Hyderabad. Crops thriving. Sowing of *rabi* crops continues. Outturn of *kharif* crops estimated at twelve annas in some places and in others at eight annas in the rupee. Prices stationary.

**Central India.**—*For week ending 4th December.*—No change in condition of crops and weather since last week's report.

**Rajputana.**—*For week ending 4th December.*—Agricultural operations satisfactory. Standing crops generally good except in Dholepur. Agricultural stock good. Pasturage and fodder sufficient generally; dear in Marwar and failing in Dholepur. Prices steady generally.

**Nepal.**—*For week ending 28th November.*—No rain. Weather cold and partly cloudy during two days in this week. Potato progressing.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 2nd HALF OF OCTOBER 1889.

Districts.	QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.									
	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHITAM (Sorghum vulgare).	
	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.
Burmah—										
Tenasserim—										
Mergui	...	...	...	...	9 14	9 14	10 14	10 14	...	...
Tavoy	...	...	...	...	12 6	12 6	14 0	14 0	...	...
Moulmein and Amherst	7 14	7 14	...	...	9 11	9 0	12 2	10 2	...	...
Pegu (delimited)—										
Pegu	...	...	...	...	8 14	8 14	10 14	10 14	...	...
Rangoon	11 2	11 2	...	...	10 6	10 6	11 2	11 2	...	...
Thongwa	...	...	...	...	9 9	9 9	10 8	10 0	...	...
Bassein	...	...	...	...	13 1	12 9	16 7	15 6	...	...
Pegu (indom)—										
Shwepyithar	...	...	...	...	9 1	8 8	9 9	9 0	...	...
Tharavadi	...	...	...	...	11 7	11 7	13 5	13 5	...	...
Henzada	...	...	...	...	11 0	10 4	13 0	13 0	...	...
Prome	12 2	12 2	...	...	12 8	9 6	14 4	13 10	...	...
Toungoo	...	...	...	...	8 0	0 2	10 10	12 13	...	...
Thayemyo	10 5	10 5	...	...	10 12	10 0	11 8	11 8	...	...
Upper Burma—										
Mandalay	13 9	14 5	...	...	10 12	11 1	11 15	12 5	...	...
Arakan—										
Sandway	...	...	...	...	19 10	19 10	22 11	22 11	...	...
Kyaukpada	...	...	...	...	14 11	14 13	16 1	16 1	...	...
Akyab	...	...	...	...	13 0	13 0	16 0	16 0	...	...
Assam—										
Surma—										
Sylhet	...	11 4	...	...	10 5	10 8	12 4	12 4	...	...
Cachar	...	8 0	...	...	9 0	10 0	12 8	12 0	...	...
Khasi and Jaintia Hills	...	...	...	...	5 8	4 8	7 0	7 0	...	...
Caro Hills	...	...	...	...	6 0	6 0	10 0	10 0	...	...
Brahmaputra—										
Goalpara	...	16 0	...	...	7 8	8 0	11 8	10 0	...	...
Kamrup	...	10 0	...	...	8 0	8 0	14 3	14 0	...	...
Darrang	...	6 8	...	...	12 0	11 0	16 0	16 0	...	...
Nowgong	...	8 0	...	...	8 8	8 0	16 0	16 0	...	...
Sibsagar	...	8 0	...	...	6 0	6 8	18 0	18 0	...	...
Lakhimpur	...	8 0	...	...	6 0	6 0	11 0	11 0	...	...
Districts.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHITAM (Sorghum vulgare).	
	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.	Present fortnightly.	Past fortnightly.
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burmah—										
Tenasserim—										
Mergui	...	...	...	...	9 14	9 14	10 14	10 14	...	...
Tavoy	...	...	...	...	12 6	12 6	14 0	14 0	...	...
Moulmein and Amherst	7 14	7 14	...	...	9 11	9 0	12 2	10 2	...	...
Pegu (delimited)—										
Pegu	...	...	...	...	8 14	8 14	10 14	10 14	...	...
Rangoon	11 2	11 2	...	...	10 6	10 6	11 2	11 2	...	...
Thongwa	...	...	...	...	9 9	9 9	10 8	10 0	...	...
Bassein	...	...	...	...	13 1	12 9	16 7	15 6	...	...
Pegu (indom)—										
Shwepyithar	...	...	...	...	9 1	8 8	9 9	9 0	...	...
Tharavadi	...	...	...	...	11 7	11 7	13 5	13 5	...	...
Henzada	...	...	...	...	11 0	10 4	13 0	13 0	...	...
Prome	12 2	12 2	...	...	12 8	9 6	14 4	13 10	...	...
Toungoo	...	...	...	...	8 0	0 2	10 10	12 13	...	...
Thayemyo	10 5	10 5	...	...	10 12	10 0	11 8	11 8	...	...
Upper Burma—										
Mandalay	13 9	14 5	...	...	10 12	11 1	11 15	12 5	...	...
Arakan—										
Sandway	...	...	...	...	19 10	19 10	22 11	22 11	...	...
Kyaukpada	...	...	...	...	14 11	14 13	16 1	16 1	...	...
Akyab	...	...	...	...	13 0	13 0	16 0	16 0	...	...
Assam—										
Surma—										
Sylhet	...	11 4	...	...	10 5	10 8	12 4	12 4	...	...
Cachar	...	8 0	...	...	9 0	10 0	12 8	12 0	...	...
Khasi and Jaintia Hills	...	...	...	...	5 8	4 8	7 0	7 0	...	...
Caro Hills	...	...	...	...	6 0	6 0	10 0	10 0	...	...
Brahmaputra—										
Goalpara	...	16 0	...	...	7 8	8 0	11 8	10 0	...	...
Kamrup	...	10 0	...	...	8 0	8 0	14 3	14 0	...	...
Darrang	...	6 8	...	...	12 0	11 0	16 0	16 0	...	...
Nowgong	...	8 0	...	...	8 8	8 0	16 0	16 0	...	...
Sibsagar	...	8 0	...	...	6 0	6 8	18 0	18 0	...	...
Lakhimpur	...	8 0	...	...	6 0	6 0	11 0	11 0	...	...

Bengal—															
Eastern Hill Tracts—															
Chittagong Hill Tracts		6 0	5 0	...	...	...	...	...	...	...	...	...	...	8 0	8 0
Hill Tipperah		...	...	...	...	...	...	...	...	...	...	...	...	8 0	8 0
Naga Hills		...	...	...	...	...	...	...	...	...	...	...	...	4 0	4 0
Eastern—															
Barkergunge		...	...	...	...	...	...	...	...	...	...	...	...	12 0	12 0
Naokholy		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Chittagong		...	...	...	...	...	...	...	...	...	...	...	...	8 0	8 0
Tripurah		...	...	...	...	...	...	...	...	...	...	...	...	8 14	9 0
Dacca		...	...	...	...	...	...	...	...	...	...	...	...	10 0	10 0
Mynensingh		...	...	...	...	...	...	...	...	...	...	...	...	16 0	16 0
Delhi—															
Khoolna		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
24-Pargunnahs		...	...	...	...	...	...	...	...	...	...	...	...	10 0	10 0
Madras—															
Madras		...	...	...	...	...	...	...	...	...	...	...	...	10 3	10 3
Howrah		...	...	...	...	...	...	...	...	...	...	...	...	9 2	9 2
Calcutta		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Hooghly		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Nudda (Kishnaghar)		...	...	...	...	...	...	...	...	...	...	...	...	9 2	9 2
Insore		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Furzedpore		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Central—															
Bankoor		...	...	...	...	...	...	...	...	...	...	...	...	10 0	10 0
Burdwan		...	...	...	...	...	...	...	...	...	...	...	...	10 5	10 5
Berhampore		...	...	...	...	...	...	...	...	...	...	...	...	10 8	10 8
Meerutabad		...	...	...	...	...	...	...	...	...	...	...	...	11 0	11 0
Soukhal Pergunnahs		...	...	...	...	...	...	...	...	...	...	...	...	9 4	9 4
Poona		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Bogra		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Rajahmundry		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Malda		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Northern—															
Rungpore		...	...	...	...	...	...	...	...	...	...	...	...	8 14	9 6
Dinapore		...	...	...	...	...	...	...	...	...	...	...	...	8 0	8 0
Jalpaiguri		...	...	...	...	...	...	...	...	...	...	...	...	8 0	8 0
Darjeeling		...	...	...	...	...	...	...	...	...	...	...	...	7 0	7 0
Orissa—															
Pooree		...	...	...	...	...	...	...	...	...	...	...	...	11 3	11 3
Cuttack		...	...	...	...	...	...	...	...	...	...	...	...	11 0	11 0
Balsore		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Chota-Nagpur—															
Singbhoom		...	...	...	...	...	...	...	...	...	...	...	...	7 0	7 0
Manbhoom		...	...	...	...	...	...	...	...	...	...	...	...	9 0	9 0
Lohardugga		...	...	...	...	...	...	...	...	...	...	...	...	8 8	8 8
Hazáribagh		...	...	...	...	...	...	...	...	...	...	...	...	8 0	8 0

† Old 14-85 coarse 20-0.

\* Not sold.

(a) Twelve annas per 100 cobs.

RETAIL PRICES FOR THE 2ND HALF OF OCTOBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

[illegible]



Oudh—	Benally	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Moradabad	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Tarai	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Benar	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Munafnagar	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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	Dehra Dun	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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	Garhwal	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Six pies per batch.

എന്നിവിടെ പരസ്യം വരും

+ New 16ms; old 1000.

• Not probable

## RETAIL PRICES FOR THE 2ND HALF OF OCTOBER 1880—continued.

[illegible]

[illegible]

Unhusked grain.

Firewood is sold by head-loads, cart loads, and truck-loads.

...but procurable.

Not finished

— — — — —  
# 2414 4444.

## RETAIL PRICES FOR THE 2ND HALF OF OCTOBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, NEET SORT.		RICE, COMMON.		JOWAR OR CHOLEM (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR BASI (Eleusine indica).		KARUM OR KARUM, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arabinum).		MAIZE (Zea Mays).		ARRAR, OR THOM, CADIAN (Cajanus indicus).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
Madras— Kadabar Coast— Malabar— S. Canara—	8 10 8 2	8 10 8 2	...	...	10 14 9 14	11 5 10 10	11 13 11 5	12 3 11 5	...	...	...	...	20 6 19 5	20 6 19 5	...	...	...	...	...	...	...	...	...	...	...	...
South, central— Coimbatore— Nilgiris— Salem—	11 2 10 11 10 13	11 2 10 11 10 13	...	...	12 3 8 0 11 13	12 3 9 10 11 13	13 2 10 0 13 3	13 2 10 6 13 3	23 3 20 0 27 10	23 3 16 13 26 3	25 6 18 3 25 6	25 6 18 3 25 6	26 3 20 14 30 13	26 3 20 14 30 13	...	...	...	...	...	...	...	...	...	...	...	...
Central— Bellary— Anantapur— Cuddalore— Kurnool—	13 6 11 8 12 8 10 13	13 6 11 8 12 8 10 13	...	...	11 13 12 13 12 0 10 5	11 13 12 13 11 13 10 11	13 3 14 0 12 6 11 6	13 3 14 0 12 6 11 6	28 5 33 0 23 11 25 5	28 5 33 0 23 11 25 5	22 10 25 6 30 2 25 0	22 10 25 6 30 2 25 0	34 6 34 0 31 8 25 13	34 6 34 0 31 8 25 13	...	...	...	...	...	...	...	...	...	...	...	
East Coast, north— Ganjam— Visakhapatnam— Godavari—	8 14 10 8 9 0	8 14 10 8 9 0	...	...	9 8 10 2 15 13	10 0 10 8 15 6	10 8 11 14 16 8	10 8 11 14 16 8	27 0 32 10 32 10	27 0 32 10 32 10	29 11 28 11 29 14	29 11 28 11 29 14	24 10 24 3 30 6	24 10 24 3 30 6	...	...	...	...	...	...	...	...	...	...	...	
East Coast, central— Kintla— Nellore—	10 6 11 8	10 6 11 8	...	...	13 11 13 13	13 11 13 13	14 5 14 13	14 5 14 13	19 0 23 11	19 0 23 11	...	...	23 13 28 13	23 13 28 13	...	...	...	...	...	...	...	...	...	...	...	
East Coast, south— Madras— Chingleput— N. Arcot— S. Arcot— Tanjore— Trichinopoly—	10 13 ...	10 13 ...	...	...	11 8 11 10 13 2 13 11 12 3	12 8 12 0 13 10 13 11 12 3	12 6 12 13 13 3 14 0 12 11	12 6 12 13 13 3 14 0 12 11	20 8 32 13 32 13 20 11 25 3	20 8 32 13 32 13 20 11 25 3	21 6 17 3 23 14 27 11 26 11	21 6 17 3 23 14 27 11 26 11	27 11 24 11 30 13 29 8 28 13	27 11 24 11 30 13 29 8 28 13	...	...	...	...	...	...	...	...	...	...		
South— Tinnevely— Madura—	8 8 9 11	8 8 9 11	...	...	11 2 11 13	11 2 11 13	13 3 12 8	13 3 12 8	...	...	...	...	27 14 27 14	27 14 27 14	...	...	...	...	...	...	...	...	...	...	...	
Mysore— Mysore— Bangalore— Kolar— Tumkur— Hassan— Kadur— Shimoga— Chitaldrug—	10 0 11 0 10 8 10 0 10 0 10 8 12 0	10 0 11 0 10 8 10 0 10 0 10 8 12 0	...	...	10 4 12 2 10 0 11 0 11 0 11 0 11 9 15 0	10 4 12 2 10 0 11 0 11 0 11 0 11 9 15 0	10 8 10 8 12 8 12 0 13 0 13 0 13 0 13 0	10 8 10 8 12 8 12 0 13 0 13 0 13 0 13 0	30 0 34 2 40 0 48 0 46 0 40 0 47 4 60 0	30 0 34 2 40 0 48 0 46 0 40 0 47 4 60 0	18 0 ...	18 0 ...	30 0 34 2 40 0 48 0 46 0 40 0 47 4 60 0	30 0 34 2 40 0 48 0 46 0 40 0 47 4 60 0	...	...	...	...	...	...	...	...	...	...		
Coorg— Coorg— Ade—	9 0 8 0	9 0 8 0	...	...	12 8 6 3	12 8 6 3	15 0 8 0	15 0 8 0	...	...	...	...	35 0 ...	35 0 ...	...	...	...	...	...	...	...	...	...	...	...	

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXXII of 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 10TH NOVEMBER, 1888.			WEEK ENDING 9TH NOVEMBER, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 10TH NOVEMBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 9TH NOVEMBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.
		Total length open.	RECEIPTS.		Total length open.	RECEIPTS.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
			R	R		R	R	R	R	R	R	R	R
16th Nov., 1889	State Lines worked by Companies												
16th ditto	East Indian	1,514	7,85,609	519	1,526	(a) 8,01,741	584	2,56,61,528	530	(a) 2,57,71,980	528	1,10,452	...
...	Patna-Gya	57	8,021	141	57	10,129	178	3,04,247	106	2,86,515	157	...	17,732
...	Dildarnagar-Ghazipur	12	611	51	...	(b) ...	...	39,027	104	(b) ...	...	...	39,927
...	Sindia	75	7,125	95	...	(c) ...	...	2,18,237	91	(c) ...	...	...	2,18,237
16th Nov., 1889	Rajputana-Malwa	1,664	3,39,575	204	1,672	3,66,000	219	1,08,97,009	205	1,14,43,886	215	5,46,877	...
16th ditto	Bengal-Nagpur (d)	183	19,723	108	305	(e) 33,979	121	8,62,004	145	(e) 10,44,783	109	1,82,779	...
16th ditto	Southern Mahratta (f)	854	74,842	88	978	72,123	74	23,89,571	87	24,37,418	87	47,847	...
16th ditto	Ditto Mysore Section	140	10,112	72	206	25,360	86	3,61,302	81	5,67,157	71	2,05,855	...
16th ditto	Indian Midland	130	8,530	63	246	(g) 60,287	89	4,06,864	93	(g) 17,20,542	80	13,13,678	...
...	Nellore Branch	83	4,071	49	83	4,053	49	1,52,297	57	1,52,848	58	551	...
9th ditto	Barcilly-Pilibhit	36	1,715	43	30	2,080	38	46,536	43	60,190	54	11,654	...
	TOTAL	4,754	12,59,945	265	5,699	14,71,752	258	4,13,41,522	272	4,34,85,319	249	21,43,797	...
	State Lines worked by Government.												
16th Nov., 1889	North-Western (h)	2,469	5,30,615	215	2,478	5,54,383	224	1,53,55,944	194	1,67,41,253	212	13,85,309	...
16th ditto	Oude and Rohilkhand	692	1,25,240	181	692	1,57,027	237	40,75,881	184	45,34,713	206	4,58,832	...
16th ditto	Bengal Central	125	14,011	112	125	18,270	146	4,45,317	111	4,65,868	116	20,551	...
16th ditto	Wardha Coal	45	18,626	414	45	18,860	352	4,00,550	320	4,69,450	327	8,891	...
16th ditto	Eastern Bengal	673	2,40,683	338	747	2,93,050	393	64,02,308	297	65,80,500	288	1,78,192	...
16th ditto	Nalhati	27	1,840	68	27	1,470	53	60,864	70	57,973	67	...	2,891
16th ditto	Tirhoot	273	28,176	103	273	59,117	217	9,77,936	120	11,48,046	136	1,71,010	...
...	Lucknow-Sitapur-Sihramau	105	3,810	36	105	7,224	69	1,52,006	45	1,61,063	57	39,057	...
16th ditto	Jorhat	25	800	35	25	989	40	37,551	47	38,324	48	773	...
9th ditto	Cherra-Companyganj	7	303	43	7	400	57	4,606	21	5,768	26	1,162	...
16th ditto	Burma (i)	392	64,413	104	553	1,00,534	182	17,60,742	149	27,64,300	162	9,94,558	...
	TOTAL	4,833	10,28,880	213	5,077	12,09,174	238	2,07,41,814	193	3,29,98,158	305	32,50,344	...
	Lines worked by Guaranteed Companies.												
16th Nov., 1889	Madras	846	1,45,949	174	840	1,77,425	211	51,86,663	193	56,72,401	212	4,85,738	...
16th ditto	South Indian	654	91,946	144	654	1,01,488	158	34,08,162	163	35,69,822	171	1,61,660	...
9th ditto	Great India Peninsula	1,504	(j) 5,78,944	385	1,447	(k) 6,72,055	405	(l) 2,43,38,424	500	(k) 1,89,34,707	411	...	54,03,717
16th ditto	Bombay, Baroda and Central India (i)	461	1,91,078	416	461	2,31,000	501	73,58,947	499	75,26,225	512	1,68,178	...
	TOTAL	3,459	10,10,867	292	3,402	11,84,568	348	4,04,91,296	362	3,57,03,155	329	...	45,88,141
	GRAND TOTAL (GUARANTEED AND STATE)	13,046	33,99,378	253	14,178	38,65,494	273	11,13,74,632	267	11,21,86,632	253	8,12,000	...
	GROSS ESTIMATED EXPENSES	...	...	...	...	...	...	5,80,93,366	139	5,86,15,499	132	5,17,131	...
	NET RECEIPTS	...	...	...	...	...	...	5,32,76,266	128	5,35,71,133	121	2,94,867	...
	Assisted Companies												
16th Nov., 1889	Tarakeshwar	22	4,986	227	22	6,054	275	1,72,141	245	1,68,698	241	...	3,443
9th ditto	Dibru-Sadiya	78	9,083	116	78	8,687	111	2,75,340	110	2,66,055	119	20,715	...
16th ditto	Bengal and North-Western	376	33,897	90	376	58,440	155	13,78,511	115	14,50,787	122	72,276	...
9th ditto	Rohilkhand-Kumaon	67	12,382	185	67	13,473	201	2,32,680	112	2,51,208	121	18,528	...
	TOTAL	543	60,348	111	543	80,654	160	20,58,672	118	21,66,748	125	1,08,076	...
	Native States.												
16th Nov., 1889	His Highness the Nizam's Guaranteed	310	30,470	98	354	51,967	147	10,13,051	109	13,80,391	122	3,67,340	...
16th ditto	His Highness the Gaekwar's	59	1,776	30	59	3,530	60	78,591	42	80,882	43	2,291	...
16th ditto	His Highness the Gaekwar's Virangam	...	...	...	...	...	...	...	...	...	...	...	...
16th ditto	Mehsana-Vadnagar	21	398	28	27	950	35	27,487	41	31,916	37	4,429	...
16th ditto	Bhavanagar-Gondal	209	14,653	70	320	24,416	74	6,01,237	95	7,76,735	89	1,75,499	...
16th ditto	Junagarh-Portbandar	68	1,840	27	68	2,581	38	1,05,437	49	1,10,137	53	10,300	...
16th ditto	Mandi	124	5,270	43	124	7,800	63	2,11,029	53	2,04,308	53	...	3,621
16th ditto	Jodhpore	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	791	54,607	69	961	91,234	95	20,38,132	84	25,94,370	90	5,56,238	...

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Katni-Umaria Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kistna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Pathankot and Rajpurn-Dhatinda State Railways.

(i) Includes the Tuangoo-Mandalay extension.

(j) Includes the Dhond-Mannad, Khangaon, Amraoti and Bhopal-Itarsi State Railways.

(k) Includes the Dhond-Mannad, Khangaon and Amraoti State Railways.

(l) Includes the Patli Branch.

M. C. BRACKENBURY, Major, R.E.,

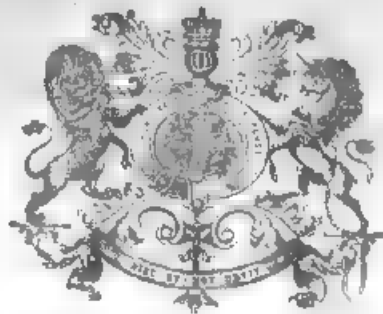
Under-Secretary.

CALCUTTA,  
The 5th December, 1889.

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No. 8, Hastings Street, Calcutta.*

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SUPPLEMENT TO  
**The Gazette of India.**

No. 50.} CALCUTTA, SATURDAY, DECEMBER 14, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*  
*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.*  
*No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.*

GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

REPORT ON THE OPERATIONS OF THE SAVINGS BANKS IN INDIA FOR THE  
YEAR 1888-89.

No. 6308, dated Calcutta, the 13th December 1889.

ORDER—By the Government of India, Department of Finance and Commerce.

Read—

Report by the Comptroller and Auditor General, on the operations of the Savings Banks in India for the year 1888-89, and annexed statements.

Ordered that the report and the statements be published in the *Gazette of India* for general information.

E. LAWRENCE,  
*Under-Secretary to the Government of India.*

No. 117, dated Calcutta, the 4th December 1889.

From—B. GAY, Esq., Comptroller and Auditor General,

To—The Secretary to the Government of India, Department of Finance and Commerce.

I have the honour to submit my report on the working of the Savings Banks in India for the year 1888-89. With the exception of a few which have been established exclusively for the benefit of certain special classes of Government employes, such as Railway non-pensionable servants, Civil Engineers and non-commissioned officers and privates of British Regiments, these Banks are open to the public, and, judging from the yearly increase in the number of depositors, seem to be steadily gaining in popularity. As before Bombay shows a larger number of depositors and average deposit balance than any other province.

2. I annex the usual statements, marked I to VII, containing the accounts and statistics for the year. It will be seen that on the 31st March 1889 there were 6,237 Savings Banks in India maintained by Government, consisting of

383,471 accounts which earned interest from Government to the amount of Rs. 26,14,830, and owned balances at their credit aggregating Rs. 7,62,58,967 exclusive of Government securities of the value of Rs. 4,81,400 held in custody by Government on behalf of depositors. There has thus been an increase this year of 85 in the number of Banks and 51,295 in the number of depositors as compared with 1887-88. During the year under review the receipts and withdrawals and interest exceeded those of last year by Rs. 66,61,650, Rs. 59,61,570, and Rs. 3,76,221 respectively.

3. The transactions of the several classes of Banks are shewn in the following table:—

DESCRIPTION OF BANKS.	Number of Banks.	Number of Depositors.	Interest earned.	Bank Balances.	Nominal value of Government Promissory Notes held for depositors.
			R	R	R
Presidency, Calcutta	1	10,931	1,01,349	26,98,378	30,000
Ditto, Madras	1	3,295	25,525	7,21,167	9,500
Ditto, Bombay	1	25,230	2,97,176	81,86,940	19,400
Railway	12	14,372	95,491	32,94,805	18,000
Civil Engineers'	1	500	36,963	10,78,619	.....
Military	165	18,142	70,430	13,53,779	.....
Post Office	6,056	311,001	19,87,895	5,89,25,279	4,04,500
<b>TOTAL</b>	<b>6,237</b>	<b>383,471</b>	<b>26,14,830</b>	<b>7,62,58,967</b>	<b>4,81,400</b>

4. The subjoined statement compares the figures for the year under report with those of last year for each class of Bank. The improvement in the Post Office Banks is greater even than last year, but as, since the 1st April, the yearly as well as the total limits of deposits have been ordered to be reduced, a check to this increase may in future be expected, and in the six months already elapsed has actually occurred. The increase in the Railway and Civil Engineers' Provident Institutions is normal as explained in the last report. The Presidency Banks, Calcutta and Madras, show a falling-off owing to depositors having shewn a preference for the Presidency Post Office Banks, but the Presidency Bank, Bombay, which shewed a considerable reduction in 1887-88, has greatly increased this year, notwithstanding that the balance in the Post Office Bank in Bombay has also increased by four lakhs. The fluctuations in the Military Banks are, as usual, dependent on the movement of troops.

NAME OF BANK.	NUMBER OF BANKS.		NUMBER OF ACCOUNTS.		BANK BALANCES.		GOVERNMENT PROMISSORY NOTES.		AVERAGE OF DEPOSITORS' BALANCES.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
					R	R	R	R	R	R
Presidency, Calcutta	...	...	50	...	...	60,149	13,400	...	...	7
Ditto Madras	...	...	...	166	...	65,150	8,500	...	9	...
Ditto Bombay	...	...	160	...	1,02,181	...	304	...	...	3
Railway	...	...	1,524	...	9,86,852	...	5,600	...	50	...
Civil Engineers'	...	...	35	...	2,82,556	...	...	...	446	...
Military	...	5	...	161	...	1,40,004	...	...	...	3
Post Office	90	...	49,844	...	83,60,366	...	...	2,200	...	4
<b>TOTAL</b>	<b>90</b>	<b>5</b>	<b>51,622</b>	<b>327</b>	<b>97,40,955</b>	<b>2,45,303</b>	<b>27,800</b>	<b>2,200</b>	<b>505</b>	<b>16</b>

5. The investments by depositors in Government Promissory Notes continue to rise as indicated in Statement VI, and from Statement VII, which gives particulars by Provinces of Presidency and Post Office Savings Banks combined, it will be observed that the general growth of depositors' balances is spread over all the Provinces.

6. My ledgers relating to the Railway and Civil Engineers' Provident Institutions have been agreed with the accounts kept by the Accountant General, Public Works Department; and the Examiners of the Accounts of the several State Railways, but the Finance and Revenue Accounts are not finally closed and the figures supplied by those officers are subject to revision.



## Statement I.

*Number of Working Banks and of the Depositors therein on 31st March 1888-89.*

BANKS.	NUMBER OF WORKING BANKS.		NUMBER OF DEPOSITORS.		Increased (+) or decreased (—) in number of Depositors.	AVERAGE NUMBER OF DEPOSITORS PER BANK.	
	1888.	1889.	1888.	1889.		1888.	1889.
<b>BANKS OPEN TO THE PUBLIC—</b>							
<b>Presidency Banks—</b>							
Calcutta . . . . .	1	1	10,881	10,931	+50	...	...
Madras . . . . .	1	1	3,461	3,295	—166	...	...
Bombay . . . . .	1	1	25,061	25,230	+169	...	...
Post Office Banks . . . . .	5,966	6,056	261,157	311,001	+49,844	43	51
<b>TOTAL</b> . . . . .	<b>5,969</b>	<b>6,059</b>	<b>300,560</b>	<b>350,457</b>	<b>+49,897</b>	<b>...</b>	<b>...</b>
<b>SERVICE INSTITUTIONS—</b>							
State Railway Provident Institutions . . . . .	12	12	12,848	14,372	+1,524	1,070	1,197
Civil Engineers' Provident Fund . . . . .	1	1	465	500	+35	...	...
Military Banks . . . . .	170	165	18,303	18,142	—161	107	109
<b>TOTAL</b> . . . . .	<b>183</b>	<b>178</b>	<b>31,616</b>	<b>33,014</b>	<b>+1,398</b>	<b>...</b>	<b>...</b>
<b>GRAND TOTAL</b> . . . . .	<b>6,152</b>	<b>6,237</b>	<b>332,176</b>	<b>383,471</b>	<b>51,295</b>	<b>...</b>	<b>...</b>

*Number of Depositors in the several classes of Banks from 1878-79 to 1888-89.*

BANKS.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.
<b>BANKS OPEN TO THE PUBLIC—</b>											
<b>Presidency Banks—</b>											
Calcutta . . . . .	12,320	9,926	10,283	11,063	11,850	11,912	12,016	11,546	11,155	10,881	10,931
Madras . . . . .	11,140	12,344	13,737	15,187	10,597	10,826	11,120	10,126	3,713	3,461	3,295
Bombay . . . . .	30,761	32,751	37,186	42,206	49,145	46,120	48,535	48,428	26,700	25,061	25,230
Post Office Banks . . . . .	...	...	...	...	39,121	84,818	122,599	155,009	219,010	261,157	311,001
District Banks . . . . .	13,040	14,982	18,977	21,880	21,972	22,661	23,695	10,618	168	...	...
<b>TOTAL</b> . . . . .	<b>67,861</b>	<b>70,003</b>	<b>80,183</b>	<b>90,336</b>	<b>127,085</b>	<b>176,367</b>	<b>217,965</b>	<b>235,727</b>	<b>260,746</b>	<b>300,560</b>	<b>350,457</b>
<b>SERVICE INSTITUTIONS—</b>											
State Railway Provident Institutions . . . . .	...	568	4,720	6,331	6,956	6,625	8,972	11,638	12,168	12,848	14,372
Civil Engineers' Provident Fund . . . . .	...	...	...	...	...	...	233	313	380	465	500
Military Banks . . . . .	16,644	20,717	17,860	18,161	13,537	20,447	16,100	15,518	16,151	18,303	18,142
<b>TOTAL</b> . . . . .	<b>84,505</b>	<b>91,288</b>	<b>102,163</b>	<b>114,828</b>	<b>147,598</b>	<b>203,439</b>	<b>243,270</b>	<b>263,196</b>	<b>289,445</b>	<b>332,176</b>	<b>383,471</b>

## Statement II.

*Deposits (including Interest), Withdrawals, and Balances in the several classes of Savings Banks from 1857-58 to 1888-89 (in thousands of Rupees) as entered in the Finance and Revenue Accounts.*

Year.	DEPOSITS.										WITHDRAWALS.										BALANCE.									
	Presidency Banks.					District Banks.					Presidency Banks.					District Banks.					Presidency Banks.					District Banks.				
	Calcutta.	Madras.	Bombay.	Other.	Total.	Calcutta.	Madras.	Bombay.	Other.	Total.	Calcutta.	Madras.	Bombay.	Other.	Total.	Calcutta.	Madras.	Bombay.	Other.	Total.	Calcutta.	Madras.	Bombay.	Other.	Total.	Calcutta.	Madras.	Bombay.	Other.	Total.
1857-58	12.01	5.45	5.38	...	22.84	8.18	4.12	3.67	...	...	...	...	...	...	...	...	...	...	...	...	15.97	16.05	9.39	13.54	...	...	...	...	...	38.98
1858-59	24.92	8.61	11.34	...	44.87	17.23	5.68	4.98	...	...	...	...	...	...	...	...	...	...	...	...	27.83	23.74	12.12	19.95	...	...	...	...	...	56.02
1859-60	8.15	8.75	11.05	...	38.99	25.11	7.71	11.83	...	...	...	...	...	...	...	...	...	...	...	...	62.27	6.78	13.36	19.18	...	...	...	...	...	57.04
1860-61	8.19	7.52	6.9	...	32.76	6.40	8.69	3.64	...	...	...	...	...	...	...	...	...	...	...	...	31.79	8.57	12.19	16.23	...	...	...	...	...	62.37
1861-62	7.00	7.01	5.71	...	33.35	7.02	6.82	5.97	...	...	...	...	...	...	...	...	...	...	...	...	34.91	8.55	12.38	16.62	...	...	...	...	...	60.91
1862-63	8.36	6.25	2.25	...	32.55	6.74	5.97	...	...	...	...	...	...	...	...	...	...	...	...	...	27.82	10.07	12.66	18.94	...	...	...	...	...	65.64
1863-64	7.97	4.34	...	...	24.75	8.09	4.87	9.3	...	...	...	...	...	...	...	...	...	...	...	...	26.18	9.25	12.13	18.01	...	...	...	...	...	64.21
1864-65	6.85	4.36	7.25	...	33.63	7.19	4.91	6.59	...	...	...	...	...	...	...	...	...	...	...	...	36.23	8.91	11.58	18.67	...	...	...	...	...	61.61
1865-66	8.21	5.02	9.02	...	38.04	7.61	4.20	6.96	...	...	...	...	...	...	...	...	...	...	...	...	36.27	9.51	12.40	21.33	...	...	...	...	...	63.38
1866-67	11.20	6.18	14.35	...	44.41	8.83	4.76	5.84	...	...	...	...	...	...	...	...	...	...	...	...	33.78	11.88	13.82	29.84	...	...	...	...	...	74.04
1867-68	15.58	7.40	13.21	...	54.91	10.70	5.58	8.12	...	...	...	...	...	...	...	...	...	...	...	...	40.73	16.76	15.64	34.93	...	...	...	...	...	88.22
1868-69	21.92	8.96	14.97	...	64.36	14.65	6.82	11.51	...	...	...	...	...	...	...	...	...	...	...	...	51.45	24.03	17.78	36.39	...	...	...	...	...	101.13
1869-70	22.95	9.58	16.89	...	66.50	20.40	8.63	12.85	...	...	...	...	...	...	...	...	...	...	...	...	59.53	26.58	18.73	42.43	...	...	...	...	...	108.10
1870-71	24.01	10.41	21.74	...	67.41	19.82	8.94	13.96	...	...	...	...	...	...	...	...	...	...	...	...	60.51	29.15	18.81	48.26	...	...	...	...	...	115.00
1871-72	27.61	10.91	28.90	...	75.04	21.48	8.23	15.21	...	...	...	...	...	...	...	...	...	...	...	...	59.90	31.68	21.09	54.79	...	...	...	...	...	130.14
1872-73	25.97	13.07	34.20	...	89.90	23.28	9.20	16.44	...	...	...	...	...	...	...	...	...	...	...	...	65.76	36.01	22.80	67.25	...	...	...	...	...	154.28
1873-74	13.30	9.23	23.32	...	117.73	27.88	12.81	32.38	...	...	...	...	...	...	...	...	...	...	...	...	91.86	34.10	23.66	89.07	...	...	...	...	...	180.15
1874-75	12.45	8.69	23.23	...	73.09	17.43	9.62	22.79	...	...	...	...	...	...	...	...	...	...	...	...	72.10	29.97	25.67	88.66	...	...	...	...	...	181.14
1875-76	12.29	8.93	21.87	...	73.75	14.51	7.93	17.97	...	...	...	...	...	...	...	...	...	...	...	...	65.34	27.91	23.40	90.86	...	...	...	...	...	189.55
1876-77	11.48	9.04	19.02	...	71.79	13.56	8.80	19.70	...	...	...	...	...	...	...	...	...	...	...	...	67.72	26.64	23.56	96.03	...	...	...	...	...	203.62
1877-78	10.70	8.90	16.67	...	70.36	12.55	8.22	23.72	...	...	...	...	...	...	...	...	...	...	...	...	73.64	25.57	24.38	91.33	...	...	...	...	...	207.9
1878-79	15.99	10.73	26.38	...	67.79	11.61	10.39	19.40	...	...	...	...	...	...	...	...	...	...	...	...	91.86	34.10	23.66	89.07	...	...	...	...	...	224.0
1879-80	24.79	18.70	70.06	...	99.62	12.38	8.73	11.27	...	...	...	...	...	...	...	...	...	...	...	...	72.10	29.97	25.67	88.66	...	...	...	...	...	235.6
1880-81	20.48	14.62	52.04	...	99.62	17.74	11.46	21.66	...	...	...	...	...	...	...	...	...	...	...	...	62.57	28.27	24.89	106.71	...	...	...	...	...	236.0
1881-82	19.23	10.89	34.21	...	1,64.59	21.06	13.95	53.48	...	...	...	...	...	...	...	...	...	...	...	...	1,11.40	35.32	32.13	1,55.11	...	...	...	...	...	232.2
1882-83	17.16	11.66	55.16	...	1,86.23	20.72	14.34	44.12	...	...	...	...	...	...	...	...	...	...	...	...	1,58.49	34.74	32.80	1,63.67	...	...	...	...	...	235.5
1883-84	16.82	11.43	53.41	...	2,45.54	20.97	13.96	58.13	...	...	...	...	...	...	...	...	...	...	...	...	1,51.56	33.25	29.35	1,73.76	...	...	...	...	...	232.2
1884-85	15.73	10.22	45.94	...	3,09.21	17.50	12.10	49.92	...	...	...	...	...	...	...	...	...	...	...	...	2,05.59	29.41	28.22	1,70.79	...	...	...	...	...	235.5
1885-86	13.05	3.67	28.10	...	3,77.22	16.47	11.59	60.12	...	...	...	...	...	...	...	...	...	...	...	...	2,41.09	28.76	27.55	1,74.28	...	...	...	...	...	235.5
1886-87	13.77	3.66	26.52	...	5,32.93	14.31	21.77	1,10.73	...	...	...	...	...	...	...	...	...	...	...	...	3,37.81	28.02	26.18	1,64.10	...	...	...	...	...	235.5
1887-88	13.77	3.66	26.52	...	4,58.48	12.95	3.27	27.14	...	...	...	...	...	...	...	...	...	...	...	...	4,61.53	26.76	8.08	81.47	...	...	...	...	...	235.5
1888-89 (1)	13.79	3.16	27.94	...	5,32.10	14.39	3.82	26.92	...	...	...	...	...	...	...	...	...	...	...	...	3,77.45	27.58	7.87	80.85	...	...	...	...	...	235.5
1888-89 (2)	...	...	...	...	5,32.10	14.39	3.82	26.92	...	...	...	...	...	...	...	...	...	...	...	...	4,37.06	26.58	7.21	81.87	...	...	...	...	...	235.5

(a) Include balances transferred from War Office.

(b) The Finance and Revenue Accounts are not yet closed and these figures are subject to revision.

## Statement III.

*Classification of Depositors in the Presidency and Post Office Banks, State Railway Provident Institutions, and Civil Engineers' Provident Fund, according to their professions, on 31st March 1889.*

	CLASS I, PROFESSIONAL.		Class II, Domestic.	Class III, Commercial.	Class IV, Agricultural.	Class V, Industrial.	Class VI, Indefinite or Non-productive.	TOTAL.
	A Having fixed Incomes.	B Having variable Incomes.						
BANKS OPEN TO THE PUBLIC.								
Presidency Banks	13,846	1,494	2,557	2,388	104	1,481	17,586	39,456
Post Office Banks	100,955	26,944	37,286	13,240	3,859	10,533	109,184	311,001
SERVICE INSTITUTIONS.								
State Railway Provident Institutions	10,104	...	4,268	...	...	...	...	14,372
Civil Engineers' Provident Fund	500	...	...	...	...	...	...	500
Military Banks	...	...	18,142	...	...	...	...	18,142
TOTAL	134,405	28,438	62,253	15,628	3,963	12,014	126,770	383,471
INCREASE IN 1888-89	120,270	22,889	54,956	12,340	2,982	7,883	110,856	332,176
	14,135	5,549	7,297	3,288	981	4,131	15,914	51,295
Percentage of each class in—								
Presidency Banks	35.1	3.8	6.5	6.1	.3	3.7	44.5	100
Post Office Banks	35.4	8.7	12.0	4.2	1.2	3.4	35.1	100
State Railway Provident Institutions	70.3	...	29.7	...	...	...	...	100
Civil Engineers' Provident Fund	100	...	...	...	...	...	...	100
Military Banks	...	...	100	...	...	...	...	100
TOTAL	48.16	2.5	29.64	2.06	.3	1.42	15.92	100

## Statement IV.

Interest earned during 1887-88 and 1888-89 and the Balances held at the close of each year.

	INTEREST EARNED		Increase (+) or Decrease (-).	BALANCE HELD AT CLOSE OF		Increase (+) or Decrease (-).	AVERAGE BALANCE IN EACH BANK.		AVERAGE BALANCE AT CREDIT OF EACH DEPOSITOR.	
	1887-88.	1888-89.		1887-88.	1888-89.		1887-88.	1888-89.	1887-88.	1888-89.
<b>BANKS OPEN TO THE PUBLIC—</b>										
<b>Presidency Banks—</b>										
Calcutta	97,732	1,01,349	+	27,58,527	26,98,378	—	60,149	—	253	246
Madras	26,667	25,525	—	7,86,317	7,21,167	—	65,150	—	224	233
Bombay	2,85,295	2,97,176	+	80,84,759	81,86,940	+	1,02,181	+	322	320
<b>TOTAL</b>	4,09,694	4,24,050	+	1,16,29,603	1,16,06,485	—	23,118	—	...	...
<b>Post Office Banks</b>	16,73,504	19,87,896	+	5,05,55,913	5,89,25,279	+	83,69,366	+	193	189
<b>SERVICE INSTITUTIONS—</b>										
State Railway Provident In- stitutions	74,299	95,491	+	23,07,953	32,94,805	+	9,86,852	+	179	229
Civil Engineers' Provident Fund	25,032	36,963	+	7,96,063	10,78,619	+	2,82,556	+	1,711	2,157
<b>Military Banks—</b>										
Bengal	34,624	49,612	+	9,62,849	8,81,861	—	80,988	—	65	61
Madras	11,590	10,764	—	2,77,254	2,28,089	—	49,165	—	134	123
Bombay	9,866	10,054	+	2,33,680	2,43,829	+	10,149	+	141	153
<b>TOTAL</b>	56,080	70,430	+	14,73,783	13,53,779	—	1,20,004	—	...	...
<b>GRAND TOTAL</b>	22,38,609	26,14,830	376,221	6,67,63,315	7,62,58,967	94,95,652	...	...	...	...



## Statement VI.

## Government Promissory Notes purchased, received and sold or returned on account of Savings Banks' Depositors.

	NOTES PURCHASED FOR DEPOSITORS.						NOTES RECEIVED FROM DEPOSITORS.						NOTES SOLD OR RETURNED.						NOTES REMAINING IN CUSTODY OF COMPTROLLER GENERAL AND ACCOUNTANT GENERAL, BOMBAY.						
	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	
BANKS OPEN TO THE PUBLIC--																									
Presidency Banks--																									
Calcutta .	...	...	...	...	28,000	21,200	1,000	7,500	2,000	2,500	500	100	3,300	7,500	2,000	...	28,000	8,500	13,500	13,500	13,500	16,100	16,500	30,000	
Madras .	4,500	500	1,000	500	1,000	8,500	...	...	...	...	...	...	4,500	500	1,000	500	...	...	...	...	...	...	1,000	9,500(a)	
Bombay .	94,500	58,500	73,200	13,500	17,300	3,800	4,000	2,000	8,000	3,500	2,000	500	86,500	58,000	73,700	36,000	13,500	4,000	8,500	26,300	23,800	31,300	18,300	19,400(b)	
Post Office Banks.	1,78,800	2,94,600	3,59,400	4,40,800	3,33,300	3,25,000	16,500	46,500	1,34,200	88,900	14,400	14,300	1,57,000	2,48,900	3,42,500	4,33,200	3,19,800	3,71,500	800	39,100	1,37,300	2,85,300	3,78,800	4,06,700	4,04,500
SERVICE INSTITUTIONS--																									
State Railway Provident Institutions	23,800	6,200	1,000	5,500	19,200	9,000	...	...	...	...	...	...	20,300	5,500	3,000	4,000	11,000	3,400	500	4,000	4,700	2,700	4,200	12,400	18,000
TOTAL .	3,01,600	3,59,800	4,34,600	4,50,100	3,94,300	3,99,100	21,500	57,100	1,44,200	94,900	16,600	14,600	2,77,800	3,20,400	4,22,300	4,67,500	3,73,200	3,87,400	25,500	76,900	1,73,400	3,29,900	4,17,400	4,55,800	4,81,400

(a) In custody of the Secretary, Presidency Bank.  
(b) do. do.

## Statement VII.

Particulars by Provinces of Presidency and Post Office Savings Banks combined on 31st March 1889.

	CLASSIFICATION OF DEPOSITORS.						INTEREST EARNED IN		BALANCE HELD AT CLOSE OF	
	Class I, Professional.		Class II, Domestic.	Class III, Commercial.	Class IV, Agricultural.	Class V, Industrial.	Class VI, Investments or Non-productive.	Total.	1887-88.	1888-89.
	A Having fixed incomes.	B Having variable incomes.								
India . . . . .	5,612	743	2,971	422	35	731	4,789	15,303	1,13,750	1,29,694
Central Provinces . . . . .	3,994	346	890	240	36	109	2,367	7,982	42,848	51,610
Burma . . . . .	2,598	401	5,923	432	58	505	1,296	11,213	37,247	50,746
Assam . . . . .	2,547	406	1,686	163	86	160	2,326	7,374	32,527	38,594
Bengal . . . . .	36,721	12,311	6,484	3,427	1,384	4,155	40,708	105,190	4,57,645	5,57,933
North-Western Provinces and Oudh . . . . .	13,431	3,237	6,129	1,038	444	828	9,908	35,015	1,89,952	2,20,156
Punjab . . . . .	8,767	1,686	2,493	651	133	443	5,868	20,041	1,44,808	1,67,818
Berar . . . . .	1,489	105	391	140	45	47	1,169	3,386	20,271	23,256
Madras . . . . .	17,822	3,820	5,871	3,392	1,189	1,661	15,946	49,701	1,99,062	2,22,746
Bombay . . . . .	30,820	5,383	7,005	5,723	553	3,375	42,393	95,252	8,45,088	9,49,393
Post Office Dead Accounts . . . . .	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	67,555	...
<b>TOTAL</b>	<b>123,801</b>	<b>28,438</b>	<b>39,843</b>	<b>15,628</b>	<b>3,963</b>	<b>12,014</b>	<b>126,770</b>	<b>359,457</b>	<b>20,83,198</b>	<b>24,11,946</b>
									<b>6,21,85,516</b>	<b>7,05,31,764</b>

(a) Includes Dead Account balance.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on  
Monday, December 2nd, 1889.**

The weather of the past week has been remarkable for its exceeding quietness throughout the whole of the Indian region. The geographical positions of the areas of high and low pressure have been maintained unaltered throughout the week, so that, though, owing to variations in the intensity of the barometric changes in different parts of the country, the relations existing between the areas of high and low pressure have undergone modifications, the general weather, winds, &c., over India have remained comparatively unaffected.

The chart of the 26th showed an area of high pressure overlying Central India, the west of the Central Provinces, Berar and Khandesh. From this region pressure decreased in all directions, was relatively low in the Indus Valley and along the foot of the Himalayas and lowest over the Andaman Sea. Calm and variable winds prevailed over the Punjab, westerly winds down the Gangetic Plain, northerly and north-north-westerly winds over Bengal and the east of the Peninsula, north-easterly winds on the west coast, calms in the Central Provinces, and variable breezes in Burma. The force was generally light or moderate. On the following day the general distribution of pressure was the same except that the barometer had risen along the Himalaya range and the low-pressure area had disappeared from that region. Calms had extended over Northern India, but otherwise the winds showed little change. On the 28th the chart still showed the same distribution of pressure and the same circulation of the winds. On the 29th the chart showed that the high-pressure area had undergone considerable extension, and that it covered nearly the whole of North-Western and Central India as well as the greater part of the Peninsula. Owing to this extension of the high-pressure area gradients had increased somewhat over the Bay and the wind had shifted to the northward over Burma. Between the morning of the 29th and that of the 30th pressure increased over North-Western India and fell elsewhere, so that at 8 A.M. on the 30th a difference of over  $\frac{1}{10}$  of an inch existed in the pressures of the Punjab and of Burma. With this increase in the barometric differences the calms which had previously prevailed over the Gangetic Plain disappeared and a steady westerly or west-north-westerly current set in. Elsewhere the wind circulation was generally unchanged. On the following day the barometer was falling almost everywhere, but the change was fairly uniform, and the general distribution of pressure and circulation of the winds were the same as those reported on the preceding day. On the 2nd the chart showed that the barometer had fallen over the western half of the Indian region and risen over



the eastern half: hence there had occurred a slight decrease in the barometric gradient. This, however, was the only important change.

*Temperature.*—The past week has on the whole been warm over Northern and Central India and Burma and cool over the Peninsula. The excess for the week ranged from only 0°·1 in Burma to 1°·8 in Guzerat and Central India, while the deficiency ranged from 0°·4 in Madras to 1°·5 in Bombay. The warmest day relatively to the average was the 26th when every Province in India recorded an excess of temperature.

The following table shows the excess or defect of the mean average temperatures of the different Provinces for the present and for the preceding week:—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
Burma	—0°·3	+0°·1
Bengal	+2°·7	+1°·0
North-Western Provinces	+2°·3	+1°·4
Punjab	—0°·7	+0°·4
Bombay	—1°·2	—1°·5
Central Provinces and Berar	+1°·4	+1°·1
Guzerat and Central India	—0°·6	+1°·8
Sind and Rajputana	—0°·6	+1°·2
Madras	+1°·4	—0°·4

This table shows that, except in Bengal, the North-West Provinces and the Peninsula, the weather of the past week has been relatively warmer than that of its predecessor.

*Rain.*—The rainfall, except in Tenasserim and Lower Burma, has been lighter than usual in all parts of the Indian region, and over a very large part of the country no rain whatever has fallen during week. The normal rainfall of the week is of course ordinarily very light, except in the Carnatic. This is shown by the rainfall of Tenasserim and Lower Burma, where, as noted above, there has been a slight excess, and where the average rainfall only equals  $\frac{1}{4}$  of an inch. Still in ordinary years there are only three of the rainfall districts which do not receive any rain during the week, while in the present year there are no fewer than 37 districts which have not received a drop of rain.

The charts show that slight showers were reported from Travancore on the 26th and 27th November, from Burma on the 27th, 28th, 29th, 30th November and December 1st and 2nd, and from Assam on the 26th, 27th, 29th and 30th November. Showers also occurred in the North Canara and Belgaum districts on one day. On the East Coast the rainfall was confined to the Kistna, Tanjore, Madura, and Tinnevelly districts. The seasonal deficiency in the Carnatic ranges from 66 per cent. in Madras South, to 32 per cent. in the East coast central. To the north of the Kistna district there is an excess.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING 2ND DECEMBER 1889.			RAINFALL DATA FROM 15TH OCTOBER TO 2ND DECEMBER 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, 15th Oc- tober to 2nd De- cember.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . . .	0'25	0'15	+0'10	16'66	5'02	+232
	Lower Burma . . . . .	0'26	0'20	+0'06	7'38	5'87	+26
	Central do. . . . .	0	0'15	-0'15	6'06	4'05	+50
	Upper do. . . . .	0'05	?	?	3'62	?	?
	Arakan . . . . .	0	0	0	7'39	5'35	+38
BENGAL AND ASSAM	Eastern Bengal . . . . .	0	0'12	-0'12	7'33	3'63	+102
	Assam (Surma) . . . . .	0'03	0'08	-0'05	4'56	3'56	+28
	Do. (Brahmaputra) . . . . .	0'10	0'27	-0'17	1'36	2'52	-46
	Deltaic Bengal . . . . .	0	0'03	-0'03	9'52	2'85	+234
	Central do. . . . .	0	0'02	-0'02	4'02	2'35	+74
	North do. . . . .	0	0'02	-0'02	0'69	2'40	-71
	Orissa . . . . .	0	0'22	-0'22	15'44	5'29	+192
	Chutia Nagpur . . . . .	0	0'11	-0'11	2'99	1'68	+78
NORTH-WESTERN PROVINCES AND ODISH.	Behar (South) . . . . .	0	0'10	-0'10	0'54	1'52	-64
	Do. (North) . . . . .	0	0'05	-0'05	0'42	1'31	-68
	North-Western Provinces (East) . . . . .	0	0'01	-0'01	1'23	0'89	+38
	Oudh (South) . . . . .	0	0'03	-0'03	0'05	0'35	-86
	Do. (North) . . . . .	0	0'02	-0'02	0'04	0'13	-69
	North-Western Provinces (Central) . . . . .	0	0'01	-0'01	0'01	0'39	-97
	North-Western Provinces (West) . . . . .	0	0'03	-0'03	0	0'08	-100
	North-Western Provinces (Submontane) . . . . .	0	0'03	-0'03	0'14	0'34	-59
PUNJAB	Punjab (South) . . . . .	0	0'03	-0'03	0	0'13	-100
	Do. (Central) . . . . .	0	0'03	-0'03	0	0'23	-100
	Do. (Submontane) . . . . .	0	0'07	-0'07	0	0'16	-100
	Do. (Hill Districts) . . . . .	0	0'16	-0'16	0	0'61	-100
	Do. (North-west) . . . . .	0	0'25	-0'25	0'01	0'82	-99
	Do. (West) . . . . .	0	0'04	-0'04	0	0'19	-100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar . . . . .	0'09	0'57	-0'49	10'60	10'17	+4
	Madras (South Central) . . . . .	0'12	0'65	-0'53	4'86	10'14	-52
	Coorg . . . . .	0'22	0'24	-0'02	11'76	8'29	+42
	Mysore . . . . .	0'03	0'17	-0'14	2'10	3'83	-45
	Konkan . . . . .	0'07	0'06	+0'01	4'90	1'97	+149
	Bombay Deccan . . . . .	0'02	0'16	-0'14	5'10	3'27	+56
	Hyderabad (North) . . . . .	0	0	0	0	0	0
CENTRAL PROVIN- CES AND BERAR.	Khandeish . . . . .	0	0'19	-0'19	1'26	2'71	-54
	Berar . . . . .	0	0'14	-0'14	3'14	2'07	+52
	Central Provinces (West) . . . . .	0	0'09	-0'09	2'95	1'07	+176
	Do. (Central) . . . . .	0	0'09	-0'09	1'72	0'94	+83
BOMBAY (NORTH)	Do. (East) . . . . .	0	0	0	1'97	1'04	+89
	Guzerat . . . . .	0	0'04	-0'04	0'02	0'48	-96
	Kattiawar . . . . .	0	0	0	0	0'24	-100
RAJPUTANA AND CENTRAL INDIA.	Sind . . . . .	0	0'03	-0'03	0	0'10	-100
	Central India (East) . . . . .	0	0'13	-0'13	0'13	0'65	-80
	Rajputana (East), Central India (West) . . . . .	0	0'01	-0'01	0	0'30	-100
	Rajputana (West) . . . . .	0	0'01	-0'01	0	0'12	-100
MADRAS	East Coast (North) . . . . .	0	0'50	-0'50	12'26	2'63	+61
	Do. (North)(a) . . . . .	0	?	?	8'90	?	?
	Hyderabad (South) . . . . .	0	0'10	-0'10	2'46	1'97	+25
	Madras (Central) . . . . .	0	0'37	-0'37	4'56	4'25	+7
	East Coast (Central) . . . . .	0'05	1'48	-1'43	8'75	12'81	-32
	Do. (South) . . . . .	0'01	1'33	-1'32	5'34	13'49	-60
	Madras (South) . . . . .	0'07	0'80	-0'79	3'58	10'63	-66

W. L. DALLAS,

Assistant Meteorological Reporter to the  
Government of India.

SIMLA, 5th December, 1889.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 7th December.*—Rainfall very slight in Vizagapatam and Tinnevely; none elsewhere. Dry crops perishing from failure of north-east monsoon over considerable areas in Chingleput, North Arcot and South Arcot, and over limited areas in Tanjore, Madras, Tinnevely, Coimbatore and Salem; wet crops under rain-fed tanks also perishing in some tracts; crops elsewhere good. Prices risen largely in Tanjore, Trichinopoly, Madura and Tinnevely, slightly in other districts. Prospects in all districts named largely dependent on early fall of rain.

**Bombay.**—*For week ending 11th December.*—Late crops in parts of the Deccan and Karnatak require rain. Cotton and other standing crops good. Harvesting and sowing operations progressing. Opium sowing continues in Baroda. Fodder generally sufficient and agricultural stock good.

**Bengal.**—*For week ending 10th December.*—No rain during the week. General agricultural prospects are favourable. Rice harvest is progressing. In many districts the outturn is estimated to be 16 annas or nearly 16 annas. In Hooghly it is about 10 annas for the whole district, and in parts of Burdwan it is poor. *Rabi* crops are doing well, and are generally satisfactory, except in Orissa where the loss by the recent storm and heavy rain has been considerable. Sugarcane is reported on well except in Pubna and Furreedpore where it will be a short crop. Poppy promises to be an excellent crop in Behar and Hazareebagh. Tobacco prospects are good, and *ganja* is a promising crop in the Rajshaye district. Prices of common rice continue to fall in almost all the Behar districts. In some districts of Bengal Proper and in Balasore a rise in the price has been reported. In Chota Nagpore prices have been stationary.

**North-Western Provinces and Oudh.**—*For week ending 11th December.*—Clear cold weather prevails, and the *rabi* crops generally are doing well. Rain much wanted in unirrigated tracts. Poppy sowings in Partabgarh are reported to have failed in many villages and the fields are being resown. Locusts have appeared in one pargana of the Rae Bareilly district and in the sadr tahsil of Fatehgarh. Food stocks are ample and prices steady.

**Punjab.**—*For week ending 11th December.*—Slight rain has fallen in Rawalpindi and Peshawar. Prices stationary in all districts except Delhi and Rawalpindi where they are rising. Harvesting of *khadrif* crops nearly over. Sowings of *rabi* still in progress. Prospects of standing crops on well-irrigated lands good; but they are generally unfavourable on other soils for want of rain which is urgently needed. Fodder sufficient throughout the province.

**Central Provinces.**—*For week ending 11th December.*—Weather clear and cold. Young *rabi* crops in excellent condition. Cotton, *jowari* and rice being harvested and are yielding good outturn. Prices generally steady.

**Burma.**—*For week ending 9th December.*—Slight rain fell in the following districts of Lower Burma:—Pegu, Moulmein, Amherst, Tavoy and Mergui; in Upper Burma there was no rain. The rainfall has been a little short in Meiktila. The crop prospects in both Upper and Lower Burma are good, and the food supply is sufficient throughout the province. In Lower Burma the price of paddy has fallen in Thayetmyo and risen slightly in Tharrawaddy and Bassein, in other districts prices show no fluctuations. In Upper Burma a fall is notice-

able in the Ruby Mines and Sagaing districts, and a slight rise in Katha, Pakoku and Magwe.

**Assam.**—*For week ending 11th December.*—Weather cold. Reaping of cold weather rice continues. Tea and other crops doing well.

**Mysore and Coorg.**—*For week ending 11th December.*—Crops generally good. Prospects favourable, but more rain is required for lately sown crops in the Kolar district. Outturn of harvests fair. Prices slightly risen in the Bangalore and Mysore districts.

Picking of coffee crops commenced in Coorg. Rice harvest begun.

**Berar and Hyderabad.**—*For week ending 11th December.*—In Berar the weather is clear and cold. Cutting of *jowari* commenced in some places. Picking of cotton continues. *Rabi* in good condition. Prices almost stationary. Fodder sufficient.

No rain during week at Hyderabad. Harvesting of *abi* crops continues. *Rabi* crops thriving. Prices stationary.

**Central India.**—*For week ending 11th December.*—The following changes have occurred since last report. Condition of agricultural stock indifferent in Bhopal and prices steady. Condition of standing crops in Bhopawar Agency very good and outturn expected equal to average. Prices have fallen in Manpur and are steady in other parts of the Agency.

**Rajputana.**—*For week ending 11th December.*—Agricultural operations satisfactory. Standing crops generally good, but slightly damaged by locusts in Marwar. Agricultural stock good. Pasturage or fodder dear in Marwar, sufficient elsewhere. Prices rising in Jhallawar, steady elsewhere.

**Nepal.**—*For week ending 5th December.*—No rain, weather cold; mornings foggy. Agricultural operations satisfactory.

E. C. BUCK,  
*Secretary to the Government of India.*

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

ABSTRACT SHOWING THE RESULT OF EMIGRATION FROM THE PORT OF CALCUTTA DURING THE  
MONTH OF OCTOBER, 1889.

*No. 1.—As to Age and Sex.*

	DENERARA.				TRINIDAD.				FUJI.				MAURITIUS.				NATAL.				SURINAM.				TOTAL.		Grand Total.
	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	Total.	Proportion of women to men.	Male.	Female.	
Under 2 years	17	18	35		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
From 2 to 10 years	60	43	109		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
" 10 " 20 "	39	17	51		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
" 20 " 30 "	110	128	238		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
" 30 " 40 "	44	18	62		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
" 40 " 50 "	4	1	5		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
Above 50 "	...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
GRAND TOTAL	184	225	609	54.48 women to every 100 men.	...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...

*No. 2.—As to places whence Emigrants came to Calcutta for Embarkation.*

Orissa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Behar	70	52	128		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
North-Western Provinces	300	126	426		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
Oudh	100	46	146		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
Central India	4	1	5		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
Punjab	4	...	4		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
Nepal and Native States	...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
Mixed, Bombay & Madras	...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...
GRAND TOTAL	184	225	609		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...		...	...	...

*No. 3.—As to Caste and Religion.*

Brahmins and high castes	14	22	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Agriculturists	150	62	212	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Artisans	52	18	70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Low castes	127	84	211	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Musulmans	4	39	80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Christians	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
GRAND TOTAL	384	225	609	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

MEMORANDUM.	Male.	Female.	TOTAL.
1. Hindus	343	186	529
2. Musulmans	4	39	80
3. Christians	...	...	...
TOTAL	384	225	609

J. W. P. MUIR-MACKENZIE,  
Under-Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXXIII of 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 17TH NOVEMBER, 1888.			WEEK ENDING 16TH NOVEMBER, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 17TH NOVEMBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 16TH NOVEMBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.
		Total length open.	RECEIPTS.		Total length open.	RECEIPTS.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
	<i>State Lines worked by Companies.</i>		<i>R</i>	<i>R</i>		<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
23rd Nov., 1889	East Indian	1,514	9,46,097	625	1,526	(a) 9,01,324	591	2,05,06,778	532	(a) 3,06,67,029	530	70,251	...
23rd ditto	Patna-Gya	57	10,483	184	57	10,280	179	3,13,122	107	3,09,180	104	...	3,642
...	Dildarnagar-Ghazipur	52	700	13	...	(b)	...	40,087	103	(b)	...	...	40,087
...	Sindia	75	6,414	86	...	(c)	...	2,24,651	91	(c)	...	...	2,24,651
23rd Nov., 1889	Rajputana-Malwa	1,604	3,36,850	202	1,672	3,58,000	214	1,12,33,859	205	1,18,03,090	216	5,69,231	...
23rd ditto	Bengal-Nagpur (d)	183	24,967	136	305	(e) 37,263	182	8,80,971	144	(e) 11,73,287	109	1,86,316	...
23rd ditto	Southern Mahratta (f)	854	79,596	93	998	79,324	81	24,69,167	88	25,24,570	87	55,403	...
23rd ditto	Ditto Mysore Section	140	12,120	87	206	22,071	73	3,73,422	81	5,89,734	71	2,16,312	...
23rd ditto	Indian Midland	136	11,448	84	246	(g) 81,098	109	4,18,312	93	(g) 18,04,921	81	13,86,609	...
23rd ditto	Villupuram-Guntakal, Nellore Branch	83	4,700	57	83	4,337	52	1,56,997	57	1,37,674	58	677	...
23rd ditto	Bareilly-Pilibhit	36	2,394	67	36	2,003	86	50,930	44	62,160	54	11,230	...
	TOTAL	4,754	14,35,829	302	5,699	14,95,708	262	4,27,60,896	272	4,49,91,945	250	22,25,049	...
	<i>State Lines worked by Government.</i>												
23rd Nov., 1889	North-Western (h)	2,469	5,44,159	220	2,478	5,53,679	223	1,59,00,103	105	1,22,54,932	212	13,94,829	...
23rd ditto	Oudh and Rohilkhand	692	1,60,885	232	692	1,53,424	225	42,36,766	186	40,90,137	205	4,53,371	...
23rd ditto	Bengal Central	125	15,040	120	123	14,380	115	4,60,357	112	4,83,512	127	23,155	...
23rd ditto	Wardha Coal	45	22,589	502	45	46,701	372	4,83,148	325	4,70,932	329	3,783	...
23rd ditto	Eastern Bengal	673	2,33,937	348	747	2,62,000	352	66,36,245	299	68,63,619	290	2,27,374	...
23rd ditto	Nalhati	27	1,848	68	27	1,990	74	62,712	72	60,705	70	...	2,007
23rd ditto	Tirhoot	273	44,509	163	273	50,862	186	10,21,605	122	11,93,179	137	1,71,574	...
23rd ditto	Lucknow-Sitapur-Sil-ramau	105	6,236	59	105	6,277	60	1,58,242	46	1,98,240	57	39,998	...
23rd ditto	Jorhat	31	815	26	25	895	36	38,300	38	30,210	48	853	...
23rd ditto	Cherra-Companyganj.	7	280	40	7	409	58	4,886	21	6,777	27	1,891	...
16th ditto	Burma (i)	441	65,376	148	553	89,160	161	18,35,118	149	28,62,123	162	10,27,005	...
	TOTAL	4,868	10,95,734	224	5,077	11,42,497	227	3,08,37,548	194	3,41,78,774	206	33,41,226	...
	<i>Lines worked by Guaranteed Companies.</i>												
23rd Nov., 1889	Madras	840	1,77,390	211	840	1,93,543	230	33,63,053	194	58,59,632	212	4,93,679	...
23rd ditto	South Indian	654	1,06,863	163	654	1,08,830	160	35,15,025	103	36,50,823	171	1,05,798	...
16th ditto	Great Indian Peninsula	3,504	(j) 7,21,412	480	3,447	(k) 7,61,454	526	(l) 50,59,836	506	(m) 1,97,01,154	416	...	53,58,682
23rd ditto	Bombay, Baroda and Central India (l)	461	2,41,337	524	461	2,47,000	336	75,99,384	300	77,80,736	314	1,81,352	...
	TOTAL	5,459	12,46,902	360	5,402	13,14,817	385	4,15,38,198	304	3,70,22,145	331	...	45,15,853
	GRAND TOTAL (GUARANTEED AND STATE)	13,101	37,78,465	588	14,178	39,59,932	279	11,51,42,642	268	11,61,93,064	254	10,50,422	...
	GROSS ESTIMATED EXPENSES	...	...	...	...	...	...	6,00,84,107	140	6,07,38,008	133	6,54,804	...
	NET RECEIPTS	...	...	...	...	...	...	5,50,58,535	128	5,54,56,156	121	3,95,021	...
	<i>Assisted Companies.</i>												
23rd Nov., 1889	Tarakeshwar	22	5,259	239	22	5,383	245	1,77,400	244	1,73,157	240	...	4,243
16th ditto	Dibru-Sadiya	78	7,512	96	78	8,339	107	2,82,852	110	3,04,415	118	21,563	...
23rd ditto	Bengal and North-Western	376	48,031	128	376	41,810	111	14,86,543	115	14,92,993	121	66,451	...
23rd ditto	Rohilkhand-Kumaun	69	8,287	131	67	12,370	185	2,41,467	113	2,63,285	123	22,318	...
	TOTAL	543	69,589	128	543	67,922	125	21,28,261	119	22,34,350	125	1,06,089	...
	<i>Native States.</i>												
23rd Nov., 1889	His Highness the Nizam's Guaranteed	310	33,552	108	354	55,257	136	10,46,603	109	14,43,262	124	2,96,659	...
23rd ditto	His Highness the Gaekwar's	59	3,511	59	59	6,480	42	82,101	42	84,001	43	1,900	...
23rd ditto	His Highness the Gaekwar's Virangam	21	974	46	27	850	31	88,461	41	32,764	37	4,393	...
23rd ditto	Mehsana-Vadnagar	209	23,854	114	339	26,972	82	6,25,090	95	8,04,311	89	1,79,221	...
23rd ditto	Dhavanagar-Gondal	68	3,042	43	68	2,751	40	1,00,879	49	1,19,332	53	10,453	...
23rd ditto	Junagarh-Portbandar	124	5,793	46	124	6,200	50	2,7,033	53	2,14,096	53	...	2,537
	TOTAL	791	70,636	89	961	94,510	98	21,08,707	84	26,92,766	91	5,88,999	...

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Katni-Munaria Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bellary-Kistna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(i) Includes the Toungoo-Mandalay extension.

(j) Includes the Dhond-Manmad, Khamsaon, Amraoti and Bhopal-Itarsi State Railways.

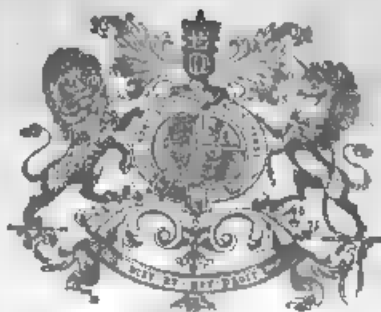
(k) Includes the Dhond-Manmad, Khamsaon and Amraoti State Railways.

(l) Includes the Patni Branch.

M. C. BRACKENBURY, Major, R.E.,

Under-Secretary.

Calcutta,  
The 12th December, 1889.



SUPPLEMENT TO  
**The Gazette of India.**

No. 51. } CALCUTTA, SATURDAY, DECEMBER 21, 1889.

**OFFICIAL PAPERS.**

*A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.*

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.*

*No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.*

GOVERNMENT OF INDIA.  
HOME DEPARTMENT.

**RULES FOR THE GUIDANCE OF INDIAN GOVERNMENT SCHOLARS IN ENGLAND.**

No. 122 (Public), dated India Office, London, the 7th November 1889.

From—The Right Honourable VISCOUNT CROSS, G.C.B., Her Majesty's Secretary of State for India,

To—His Excellency the Most Honourable the Governor General of India in Council.

In continuation of my Despatch No. 45, dated the 24th of March 1887, I enclose, for the information of Your Excellency in Council, a copy of the Rules for the guidance of Indian Scholars while in this country, as recently revised by me.

2. I request that these revised Rules may be substituted for the Rules forwarded with the Despatch above mentioned.

*Rules for Indian Government Scholars in England.*

1. Every scholar shall, on reaching England, at once present himself at the India Office, and report his arrival in writing.

2. Every scholar shall, without any unnecessary delay, inform the Secretary of State to which University he intends to proceed, and shall at once take steps to enter himself at the College he has selected.

3. Every scholar shall, within four weeks of reaching England, submit for the approval of the Secretary of State a statement showing the general course of study he proposes to follow; and the course approved shall not be changed without the sanction of the Secretary of State.

4. Every scholar shall, at the end of each University term, submit to the Secretary of State a certificate from the proper College or University authority, showing that his residence, conduct, and progress in study have been satisfactory during the term.

5. Every scholar shall at all times obey such instructions as he may receive from the Secretary of State.

6. Subject to due compliance with the above conditions, the allowance, at the rate of 200*l.* a year for three years, will be paid quarterly, in advance, by the India Office, commencing from the date of the scholar's reporting his arrival in England.

7. Every scholar will forfeit his scholarship who, not being disabled by illness or prevented by any other cause which the Secretary of State may consider sufficient, fails to complete a residence of three years in England, or who is guilty of misconduct or disregard of the orders of the Secretary of State. If a scholarship be forfeited, the scholar will lose his claim to a free return passage to India, and will further become liable to refund the cost of his free passage to England.

8. The scholars will be under the special supervision and charge of the Political Aide-de-Camp to the Secretary of State, through whom the necessary orders will be given, and to whom all reports and other communications respecting them should be sent.

C. J. LYALL,

*Offg Secy. to the Govt. of India.*

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weather Review of India for the week ending 8 a.m. on  
Monday, December 9th, 1889.

Exceptionally fine settled weather has prevailed throughout the Indian region during the week under review. With the single exception of the 5th, when a slight and temporary modification occurred, the distribution of pressure and the general direction of the various wind currents have continued uninterruptedly the same throughout the week. In consequence the weather has also been settled, and with one or two local exceptions there has been no rain throughout the whole country.

The chart of the 3rd showed a large high pressure area overlying North-Western India and a low pressure area over the Andaman Sea. The difference of pressure was not large, readings ranging from 30·077" at Jeypore to 29·868" at Diamond Island. The winds were feebly cyclonic over Sind and Guzerat and the neighbouring portions of the Arabian Sea. Elsewhere the directions were generally normal, except over the Bay, where they were unusually northerly and north-westerly. Many calms were reported from North-Eastern India. The only changes of importance on the 4th were the brisk barometric fall at Jacobabad and Dera Ismail Khan and the shift of wind south-east at some stations in the Punjab. These changes pointed to the existence of a low pressure area over the Indus Valley.

In other respects the distribution of pressure, the winds, and the weather were unchanged. The observations of the 5th showed that a shallow depression had crossed the Punjab, and that the centre lay between Lahore and Sirsa. Slight cyclonic movements were shown by the winds in the Punjab, but the influence of the depression was restricted to that Province, and conditions elsewhere were unaltered. By the morning of the 6th the depression had disappeared and pressure decreased steadily from a maximum in the Indus Valley to a minimum over the Andaman Sea. The wind directions remained fairly normal except for the unusual amount of westing in the winds over the west of the Bay. On the 7th the low pressure area, which has previously been located over the Andaman Sea, commenced a movement in a south-westerly direction. This was accompanied by a fall of the barometer at Colombo and a rise elsewhere. This was the only important change on this day. On the 8th pressure began to give way over the whole of the Indian region; but as the fall was fairly uniform the relative distribution remained un-



altered, and the wind circulation was unchanged. On the 9th pressure was still falling, but the decrease continued general and fairly uniform, and hence there was no alteration in the relative distribution.

*Temperature.*—During the past week a steady rise of the general temperature over India occurred till the 5th when it reached its maximum. From that date a steady fall set in and lasted till the close of the week. The mean temperature was above the normal average during the whole week in the Central Provinces and Madras, and for five out of the seven days in all other provinces except Bombay, Sind, and Rajputana, where the majority of days were cooler than the average. A sudden fall of temperature occurred over Baluchistan on the 5th, and this fall subsequently spread into Sind and Rajputana. The following table shows the variations of the mean temperature of the present and of the past weeks from the normal average :—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
Burma . . . . .	+0.1	+0.7
Bengal . . . . .	+1.0	+0.6
North-Western Provinces . . . . .	+1.4	+1.5
Punjab . . . . .	+0.4	+0.8
Bombay . . . . .	-1.5	-0.3
Central Provinces . . . . .	+1.1	+2.9
Guzerat and Central India . . . . .	+1.8	+1.6
Sind and Rajputana . . . . .	+1.2	-1.3
Madras . . . . .	-0.4	+1.2

This table shows that the general temperature exceeded the average in all regions except Bombay, Sind, and Rajputana, and that in all provinces except Sind and Rajputana and Bengal the mean temperature relatively to the average was higher than in the previous week.

*Rain.*—The past week has been practically rainless throughout the whole of the Indian region. The highest average fall was in Tenasserim, where it slightly exceeded one-tenth of an inch. In forty-two divisions no rain whatever fell during the week, and in three others the average fall of the division was only 0.01 inch. As will be seen from the second column of the accompanying table, the average rainfall over the greater part of India during the week under review is exceedingly slight, but in Malabar, the East Coast, North, Central and South, and Madras South, the average is between half an inch and an inch, and in some of these divisions, where the deficient fall of the present week exceeds deficient falls in several preceding weeks the want of rain is very serious.

What little rain fell during this week, occurred on the following dates :—

In Tenasserim	on the 3rd and 4th.
" Lower Burma	" 5th " 6th.
" Assam	" 6th " 7th.
" North-West Punjab	" 5th " 6th.
" Malabar	" 6th " 8th.
" Sind	" 3rd.
" South Madras	" 9th.

The heaviest falls during the week were 1 inch at Quilon, 0.5 inch at Tinnevely, and 0.4 inch at Murree. The rainfall in the North-West Punjab was very slight and confined to the montane and submontane districts close to the North-West frontier.

The concluding column of the table shows that practically no rain whatever has fallen over the whole of the Punjab and Rajputana, and the greater part of the North-Western Provinces, Sind, Guzerat, and Kattiawar, since the 15th of October up to the present date, and that over the south of the Peninsula, the seasonal rainfall is from 35 to 65 per cent. short of the normal average.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING 9TH DECEMBER 1889.			RAINFALL DATA FROM OCTOBER 15TH TO DECEMBER 9TH 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, October 15th to 9th Dec- ember.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . .	0'11	0	+0'11	16'77	5'02	+234
	Lower Burma . . . .	0'04	0'06	-0'02	7'42	5'93	+25
	Central do. . . . .	0	0'02	-0'02	6'06	4'07	+49
	Upper do. . . . .	0	?	?	3'62	?	?
	Arakan . . . . .	0	0'07	-0'07	7'39	5'41	+37
BENGAL AND ASSAM	Eastern Bengal . . . .	0	0'39	-0'39	7'33	4'02	+82
	Assam (Surma) . . . .	0'02	0'03	-0'01	4'58	3'59	+28
	Do. (Brahmaputra) . . .	0'06	0'13	-0'07	1'41	2'65	-47
	Deltaic Bengal . . . .	0	0'14	-0'14	0'52	2'99	+218
	Central do. . . . .	0	0'08	-0'08	3'57	2'43	+47
	North do. . . . .	0	0'03	-0'03	0'69	2'43	-72
	Orissa . . . . .	0	0'20	-0'20	15'44	5'49	+181
	Chutia Nagpur . . . .	0	0'05	-0'05	2'99	1'73	+73
	Behar (South) . . . .	0	0	0	0'54	1'52	-64
	Do. (North) . . . . .	0	■	0	0'42	1'31	-68
NORTH-WESTERN PROVINCES AND ODDH.	North-Western Provinces (East) . . . . .	0	0	■	1'23	0'89	+38
	Oudh (South) . . . . .	0	0'03	-0'03	0'05	0'38	-87
	Do. (North) . . . . .	0	0'08	-0'08	0'04	0'21	-81
	North-Western Provinces (Central) . . . . .	0	0	0	0'01	0'39	-97
	North-Western Provinces (West) . . . . .	0	0'05	-0'05	0	0'12	-100
	North-Western Provinces (Sub-montane) . . . .	0	0'05	-0'05	0'14	0'39	-64
PUNJAB	Punjab (South) . . . .	0	0'07	-0'07	0	0'20	-100
	Do. (Central) . . . . .	■	0'05	-0'05	0	0'28	-100
	Do. (Sub-montane) . . .	■	0'21	-0'21	0	0'37	-100
	Do. (Hill Districts) . .	0	0'26	-0'26	0	0'87	-100
	Do. (North-West) . . .	0'01	0'16	-0'15	0'02	0'98	-98
	Do. (West) . . . . .	0	0'03	-0'03	0	0'23	-100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar . . . . .	0'06	0'52	-0'46	10'66	10'68	0
	Madras (South Central) .	0	0'61	-0'61	4'86	10'76	-55
	Coorg . . . . .	0	0'07	-0'07	11'76	8'36	+41
	Mysore . . . . .	0	0'11	-0'11	2'10	3'94	-52
	Konkan . . . . .	0	0'02	-0'02	4'90	1'99	+146
	Bombay—Deccan . . . .	0	0'17	-0'17	5'10	3'44	+48
	Hyderabad (North) . . .	0	0'01	-0'01	1'26	2'72	-54
CENTRAL PROVIN- CES AND BERAR.	Khandeish . . . . .	0	0'01	-0'01	1'26	2'72	-54
	Berar . . . . .	0	0'16	-0'16	3'14	2'23	+41
	Central Provinces (West) .	0	0'09	-0'09	2'95	1'16	+154
	Do. (Central) . . . . .	0	0'16	-0'16	1'72	1'10	+56
	Do. (East) . . . . .	0	0'09	-0'09	1'97	1'14	+73
BOMBAY (NORTH)	Guzerat . . . . .	0	0'02	-0'02	0'02	0'50	-96
	Kattiawar . . . . .	0	0'02	-0'02	0	0'26	-100
	Sind . . . . .	0'01	0'01	0	0'01	0'10	-90
RAJPUTANA AND CENTRAL INDIA.	Central India (East) . . .	0	0'06	-0'06	0'13	0'71	-82
	Rajputana (East), Central India (West) . . . . .	0	0'03	-0'03	0	0'32	-100
	Rajputana (West) . . . .	0	0'01	-0'01	0	0'13	-100
MADRAS	East Coast (North) . . .	0	0'83	-0'83	12'26	8'45	+45
	Do. (North) (a) . . . .	0	?	?	8'90	?	?
	Hyderabad (South) . . .	0	0'05	-0'05	2'46	2'02	+22
	Madras (Central) . . . .	0	0'05	-0'05	4'50	4'31	+6
	East Coast (Central) . . .	0	0'81	-0'81	8'75	13'62	-36
	Do. (South) . . . . .	0'01	1'04	-1'03	5'35	14'54	-63
	Madras (South) . . . .	0'07	0'98	-0'91	3'05	11'60	-68

SIMLA, 13th December, 1889.

W. L. DALLAS,  
Assistant Meteorological Reporter to the  
Government of India.

E. C. BUCK,  
Secretary to the Government of India.

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

**Weekly Report on the State of the Season and Prospects of the Crops.**

**Madras.**—*For week ending 14th December.*—Rainfall very slight in Tanjore, Madura and Tinnevely, and none elsewhere. Crops perishing from continued failure of rains in Chingleput, North Arcot, South Arcot, Tanjore, and parts of Madura, Tinnevely, Salem, and Trichinopoly; elsewhere generally good. Prospects in all districts named not improved: rain urgently wanted. Prices continue to rise, especially in the Southern Districts and Nellore. Since receipt of above reports, good rain has been falling from 17th at Madras and adjacent districts, over 2 inches reported from Trichinopoly, and 2 to 4 inches at four stations in South Arcot.

**Bombay.**—*For week ending 18th December.*—Rain generally wanted in the Deccan and Karnatak. Standing crops in parts diseased or suffering for want of moisture, otherwise good. Cotton prospects generally favourable. Opium sowing in Baroda, and harvesting and sowing operations generally progressing. Fodder sufficient, and agricultural stock healthy.

**Bengal.**—*For week ending 17th December.*—Weather has been cold and dry. No rain. Rice harvest is in full progress, and is expected to yield a good crop in most districts. In some quarters, however, the outturn is reported to be somewhat below the average, and in Burdwan it is only 11 annas, in Hooghly 10 annas, and in Bankoora 11 annas. *Rabi* crops are generally in good condition and promising, except in Orissa where they have suffered considerable loss from the late storm and heavy rain. Poppy prospects are favourable except in the Hajipore sub-division of Mozufferpore, where the later sowings are more or less a failure for want of moisture. Tobacco is a promising crop. Sugarcane is reported to be a good crop in many districts, but in Pubna it is deficient. Price of rice is said to have fallen in many districts owing to the appearance of the new crop in the market.

**North-West Provinces and Oudh.**—*For week ending 18th December.*—The weather continues seasonable, and the *rabi* crops generally are thriving, but rain is wanted. Markets are well supplied and prices stationary.

**Punjab.**—*For week ending 18th December.*—No rain. Prices stationary in all districts, except Rawalpindi, where they are rising. Harvesting of *kharif* crops over; sowings of *rabi* going on slowly for want of rain. Prospects of standing crops good, but rain is badly wanted throughout the Province. Fodder sufficient, except in Sialkot. Poppy sowings commenced in Jullundur.

**Central Provinces.**—*For week ending 18th December.*—Weather cold and slightly cloudy at times. Harvesting of *kharif* crops continues. Outturn good. Young *rabi* crops in good condition, but some rain is now required for wheat and gram. Prices steady or falling.

**Burma.**—*For week ending 14th December.*—No rain fell anywhere in the Province. The price of paddy has fallen in Prome, Shwegyin, and Toungoo, and risen in the Lower Chindwin owing to exhaustion of local supplies; elsewhere the price remains stationary. The crop prospect remains unchanged.

**Assam.**—*For week ending 18th December.*—Weather seasonable. No rain. Harvesting of winter rice continues. Tea season closing. Outturn of winter potatoes in Khasi Hills reported bad.

**Mysore and Coorg.**—*For week ending 18th December.*—Crops in good condition in Mysore, except in parts of Bangalore district, where more rain want-

ed. Prospects generally favourable. Prices risen in Bangalore and Kolar districts slightly.

Rice harvest in progress in Coorg.

**Berar and Hyderabad.**—*For week ending 18th December.*—In Berar the weather is clear and cold. Picking of cotton continues; cutting and in some places threshing of *jowari* commenced. *Rabi* in good condition. Fodder sufficient. Prices stationary.

No rain during week at Hyderabad. Harvesting of *abi* crops continues; *rabi* crops thriving. Prices stationary.

**Central India.**—*For week ending 18th December.*—Condition of agricultural stock in Bundelkhand improved. Crops damaged by locusts in Sirsi, in Goona Agency. With these exceptions conditions remain unchanged.

**Rajputana.**—*For week ending 18th December.*—Agricultural operations satisfactory. Standing crops generally good, but somewhat damaged by locusts in parts of Marwar. Agricultural stock good. Pasturage or fodder sufficient, except in Marwar. Prices steady generally.

**Nepal.**—*For week ending 12th December.*—No rain. Weather very cold and partly cloudy. Sowing of wheat still in progress.

E. C. BUCK,

Secretary to the Government of India.

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GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

*Comparative Statement of the Net Indian Sea and Land Customs Revenue (excluding Salt Revenue) for the first eight months of the official year 1889-90, and of the  
eighteen preceding years. •  
(IN THOUSANDS OF RUPEES.)*

FOR THE EIGHT MONTHS, APRIL TO NOVEMBER.																				
YEAR.	BENGAL.				BOMBAY.				SINDH.				MADRAS.				TOTAL BRITISH INDIA.			
	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	On Exports.	Total Revenue.	On Imports of Liquors.	On other Imports.	Total Revenue.	
1871-72	6,71	49,00	13,13	68,84	4,79	29,86	2,58	37,23	86	86	1,17	2,89	8,15	9,00	15,44	1,06	2,79	15,17	16,02	
1872-73	8,38	48,46	14,63	71,47	3,52	28,03	2,21	33,76	73	81	1,49	3,03	7,85	7,18	17,62	1,08	3,15	21,34	26,47	
1873-74	6,78	46,47	10,59	63,84	4,18	29,42	2,19	35,79	78	67	77	2,22	8,96	8,74	20,07	2,16	3,04	15,87	21,07	
1874-75	7,61	52,61	8,00	68,22	4,21	30,06	2,43	36,70	75	48	87	2,10	9,16	8,66	20,02	2,66	4,42	10,80	17,88	
1875-76	8,18	50,73	9,06	67,97	4,41	25,82	3,56	33,79	83	67	95	2,45	9,55	8,18	20,52	2,49	3,23	18,80	24,52	
1876-77	8,29	44,31	8,51	61,11	5,42	26,64	■	32,74	101	50	16	1,67	8,21	5,48	17,23	2,97	3,49	13,45	19,81	
1877-78	9,55	54,56	10,34	74,45	5,64	31,43	6,2	37,69	134	60	27	2,21	5,60	1,38	10,54	3,31	4,00	9,93	17,14	
1878-79	8,67	45,10	9,11	62,88	5,62	29,17	1,37	35,16	126	90	16	1,81	6,20	2,93	12,87	4,66	4,48	15,09	24,17	
1879-80	2,83	42,20	5,93	55,96	6,15	24,13	1,17	31,45	206	49	14	2,69	6,18	4,53	14,10	4,42	4,14	17,75	26,31	
1880-81	8,54	40,52	7,77	56,83	5,61	35,12	1,26	41,99	309	75	15	3,99	7,17	5,52	16,00	3,12	5,24	21,19	29,85	
1881-82	8,55	37,49	9,88	55,92	6,65	30,82	1,01	38,48	296	91	22	3,69	6,61	3,49	13,31	4,54	5,14	24,53	34,21	
1882-83	9,28	5	10,02	19,35	6,57	1,308	92	6,44	2,27	3	38	2,68	2	2,65	6,26	5,23	5	79,32	34,60	
1883-84	9,28	17	11,48	20,93	7,10	30	89	8,29	2,42	2	33	2,77	8	3,48	6,01	5,18	11	31,43	26,71	
1884-85	7,88	22	6,54	14,64	6,81	28	1,16	8,25	2,56	4	34	2,94	3	3,66	6,78	5,12	6	15,57	20,75	
1885-86	8,51	16	8,62	17,29	7,75	35	72	8,82	2,94	3	49	3,46	8	2,44	5,69	4,15	5	24,42	28,62	
1886-87	8,52	31	5,82	15,65	7,93	36	79	9,07	3,70	8	53	3,91	12	3,59	7,68	5,77	10	25,09	26,66	
1887-88	8,12	34	8,87	17,33	9,57	34	1,07	10,98	3,32	5	50	3,87	6	3,07	9,65	6,05	1	21,85	27,91	
1888-89	9,67	4,70	9,68	23,64	9,51	2,64	90	13,05	3,44	62	27	4,33	6,85	6,9	11,06	5,67	63	14,25	20,55	
1889-90	9,48	6,25	7,23	22,96	10,30	2,00	1,113	13,43	3,63	47	37	4,47	6,77	5,1	12,03	5,60	1,77	24,11	31,48	

• The amount refunded is greater than the duty collected.

DEPARTMENT OF FINANCE AND COMMERCE,

STATISTICAL BRANCH:

Calcutta, 16th December, 1889.

J. F. FINLAY,

Off. Secretary to the Government of India.

GOVERNMENT  
PUBLIC WORKS  
CIVIL  
Irriga

STATEMENT OF IRRIGATION AND RAINFALL

Comparative Statement of Irrigation and Rainfall for the

Works.	Items.	Area of the district in acres.	Cultivable area in acres.	Cultivated area in acres.	AREAS			
					SOWN FROM APRIL TO NOVEMBER 1888, I.E., FIRST CROP.		SOWN 1888 TO SECOND	
					Total acres.	In comparison with 1887-88.		Total acres.
						Increase	Decrease	
1	2	3	4	5	6	7	8	9
Ganjam.	Government land	2,690,264	438,520	341,924	144,806	...	10,667	9,305
	Inam land .	157,136	136,908	116,194	36,972	...	1,057	2,503
	Zemindari land .	2,472,888	846,968	60,714	10,042	...	28	475
	TOTAL	5,320,288	1,422,405	518,832	191,820	...	11,752	12,283
	Visagapatam.							
	Government land	1,193,406	129,690	105,801	19,244	...	8,303	3,494
	Inam land .	50,819	50,479	21,368	7,391	...	7,009	1,819
	Zemindari land .	9,630,655	8,926	8,926	8,926	...	1,924	...
	TOTAL	10,874,880	189,095	135,495	35,561	...	17,236	5,313
	Godavari.							
Godavari anicut	Government land	...	...	...	290,057	7,869	...	17,290
	Inam land .	...	...	...	16,881	8,567	...	11,313
	Zemindari land .	...	...	...	126,245	...	583	6,786
	TOTAL	...	...	...	585,183	15,853	...	35,411
All other works	Government land	...	...	...	38,263	...	11,495	3,445
	Inam land .	...	...	...	15,701	...	7,043	2,193
	Zemindari land .	...	...	...	526	...	6	30
	TOTAL	...	...	...	54,490	...	18,544	5,668
TOTAL	Government land	2,443,763	1,086,621	678,980	328,320	...	3,626	20,735
	Inam land .	548,073	471,977	373,468	184,582	1,524	...	13,528
	Zemindari land .	2,037,576	797,039	479,698	126,771	...	589	6,816
	TOTAL	5,029,409	2,355,637	1,534,146	639,673	...	2,591	41,079
Kistna anicut	Kistna.							
	Government land	...	...	...	233,876	4,109	...	4,255
	Inam land .	...	...	...	77,733	19,918	...	182
	Zemindari land .	...	...	...	75,509	872	...	12
	TOTAL	...	...	...	387,118	24,899	...	4,449
All other works	Government land	...	...	...	112,819	83,513	...	16,953
	Inam land .	...	...	...	26,386	22,179	...	19,011
	Zemindari land .	...	...	...	3,545	390	...	1,030
	TOTAL	...	...	...	142,750	106,085	...	36,994
TOTAL	Government land	3,508,092	2,314,936	21,436,095	346,695	87,622	...	21,208
	Inam land .	682,628	645,596	426,763	104,119	42,097	...	19,193
	Zemindari land .	1,183,360	327,569	253,005	79,054	1,265	...	1,042
	TOTAL	5,374,080	3,288,101	2,116,765	529,868	130,984	...	41,443
Penner anicut	Nellore.							
	Government land	...	...	...	34,299	...	866	9,611
	Inam land .	...	...	...	9,617	...	971	3,786
	Zemindari land .	...	...	...	...	...	...	...
	TOTAL	...	...	...	43,916	...	1,837	13,397
Sangam anicut	Government land	...	...	...	47,084	14,555	...	3,381
	Inam land .	...	...	...	9,017	2,782	...	287
	Zemindari land .	...	...	...	...	...	...	...
	TOTAL	...	...	...	56,101	17,337	...	3,668

SUPPLEMENT TO THE GAZETTE OF INDIA, DECEMBER 21, 1889. 1363

OF INDIA,  
DEPARTMENT.  
WORKS.  
tion.

IN THE MADRAS PRESIDENCY FOR 1888-89.

years 1887-88 and 1888-89 in the Madras Presidency.

IRRIGATED.						RAINFALL IN INCHES.			
FROM DECEMBER MARCH 1889, i.e., CROP.		WHOLE YEAR, 1888-89.		Percentage of increase or decrease in 1888-89.		Months.	1887-88.	1888-89.	Percentage of increase or decrease in 1888-89.
In comparison with 1887-88.		Total acres.	In comparison with 1887-88.						
Increase.	Decrease.		Increase.	Decrease.					
10	11	12	13	14	15	16	17	18	19
2,490	...	154,111	...	8,177	— 5.04		Inches.	Inches.	
1,548	...	39,475	491	...	+ 1.26	S.W. monsoon .	31.55	18.13	— 41.79
475	...	10,517	447	...	+ 4.44	N.E. do. .	10.07	7.06	— 29.95
4,513	...	204,103	...	7,239	— 3.43	TOTAL .	41.62	25.09	— 37.31
...	236	22,738	...	8,539	— 27.30	S.W. monsoon .	...	...	...
721	...	9,210	...	6,288	— 40.57	N.E. do. .	40.69	25.23	— 37.99
...	...	8,926	...	1,924	— 17.13	TOTAL .	8.11	9.67	+ 19.23
485	...	40,874	...	16,751	— 29.07		48.80	34.90	— 28.48
7,626	...	307,347	15,495	...	+ 5.31		...	...	...
4,639	...	180,216	13,206	...	+ 7.91		...	...	...
2,033	...	133,031	1,450	...	+ 1.10		...	...	...
14,298	...	620,594	30,151	...	+ 5.11		...	...	...
548	...	41,708	...	10,047	— 20.79		...	...	...
391	...	17,804	...	6,652	— 27.10		...	...	...
...	...	556	...	6	— 1.07		...	...	...
939	...	60,158	...	17,605	— 22.64		...	...	...
8,174	...	349,055	4,648	...	+ 1.32	S.W. monsoon .	...	...	...
5,030	...	195,110	6,554	...	+ 3.42	N.E. do. .	26.78	21.69	— 19.00
2,033	...	133,587	1,444	...	+ 1.09	TOTAL .	10.60	9.55	— 9.91
15,237	...	680,752	12,546	...	+ 1.88		37.38	31.24	— 16.43
2,384	...	238,131	6,493	...	+ 2.80		...	...	...
...	2,924	77,915	16,994	...	+ 27.89		...	...	...
...	42	75,521	830	...	+ 1.11		...	...	...
...	582	391,567	24,317	...	+ 6.62		...	...	...
15,843	...	129,772	99,356	...	+ 326.66		...	...	...
18,952	...	453,997	41,131	...	+ 964.16		...	...	...
...	746	4,675	...	353	— 7.16		...	...	...
34,049	...	179,744	140,134	...	+ 353.78		...	...	...
18,227	...	357,903	105,849	...	+ 40.39	S.W. monsoon .	...	...	...
16,028	...	123,312	58,125	...	+ 18.17	N.E. do. .	23.53	18.99	— 21.84
...	788	80,096	477	...	+ 0.60	TOTAL .	9.18	8.37	— 8.82
33,467	...	571,313	164,451	...	+ 40.42		32.71	26.76	— 18.19
...	4,825	43,910	...	5,691	— 11.47		...	...	...
61	...	13,403	...	910	— 6.36		...	...	...
...	...	...	...	...	...		...	...	...
...	4,764	57,313	...	6,601	— 10.33		...	...	...
...	13,324	44,465	2,231	...	+ 2.85		...	...	...
...	2,168	9,304	614	...	+ 7.06		...	...	...
...	...	...	...	...	...		...	...	...
...	15,492	53,769	1,845	...	+ 3.55		...	...	...

## Comparative Statement of Irrigation and Rainfall for the

Works.	Items.	Area of the district in acres.	Cultivable area in acres.	Cultivated area in acres.	AREAS			
					SOWN FROM APRIL TO NOVEMBER 1888, i.e., FIRST CROP.		SOWN 1888 TO SECOND	
					Total acres.	In comparison with 1887-88. Increase.	Decrease.	Total acres.
1	2	3	4	5	6	7	8	9
All other works	Nellore—contd.							
	Government land	...	...	...	84,947	...	13,289	23,598
	Inam land	...	...	...	16,873	...	2,531	4,724
	Zemindari land	...	...	...	21	...	5	616
	TOTAL	...	...	...	101,841	...	15,825	29,338
TOTAL	Government land	2,589,369	1,617,971	824,772	160,330	400	..	36,988
	Inam land	643,191	560,352	320,013	35,507	...	720	8,797
	Zemindari land	2,375,040	46	45	21	...	5	616
	TOTAL	5,609,600	2,178,329	1,144,831	195,858	...	325	46,401
Cuddapah.	Government land	4,795,121	1,788,405	1,195,735	72,937	...	7,659	63,603
	Inam land	791,786	591,577	401,577	49,613	...	20,751	41,303
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	5,586,909	2,481,946	1,688,412	113,550	...	18,412	104,928
Anantapur.	Government land	2,757,912	2,033,304	949,821	45,638	...	14,656	87,820
	Inam land	617,448	607,198	382,942	15,143	...	2,403	13,730
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	3,375,360	2,630,702	1,339,763	60,835	...	17,059	71,570
Bellary.	Government land	2,765,124	2,267,245	1,383,110	29,222	143	...	3,279
	Inam land	822,076	817,800	621,038	11,555	...	463	1,454
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	3,587,200	3,085,045	2,004,148	40,777	...	320	6,733
Kurnool-Cuddapah canal.	Government land	...	...	...	18,607	9,107	...	4,190
	Inam land	...	...	...	9,619	5,145	...	1,470
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	28,226	14,253	...	5,660
All other works	Government land	...	...	...	22,686	...	4,670	6,872
	Inam land	...	...	...	15,084	...	4,913	6,084
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	37,770	...	9,583	12,956
TOTAL	Government land	3,955,087	1,583,696	1,099,598	41,293	4,407	...	11,052
	Inam land	1,017,073	1,006,662	736,245	24,703	233	...	7,554
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	4,972,160	2,590,358	1,835,843	65,996	4,640	...	18,616
Chembarambakkam tank.	Chingleput.							
	Government land	...	...	...	8,005	2	...	4,346
	Inam land	...	...	...	2,056	113	...	525
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	10,061	120	...	4,871
Madras water-supply and irrigation extension project.	Government land	...	...	...	4,538	...	255	4,760
	Inam land	...	...	...	841	...	142	308
	Zemindari land	...	...	...	98	...	46	66
	TOTAL	...	...	...	5,477	...	443	5,143
All other works	Government land	...	...	...	263,118	5,699	...	90,511
	Inam land	...	...	...	48,510	...	9,088	16,332
	Zemindari land	...	...	...	2,041	...	366	490
	TOTAL	...	...	...	313,669	...	3,755	107,333



# SUPPLEMENT TO THE GAZETTE OF INDIA, DECEMBER 21, 1889. 1365

years 1887-88 and 1888-89 in the Madras Presidency—continued.

## IRRIGATED.

FROM DECEMBER  
MARCH 1889, &c.,  
CROP.

### WHOLE YEAR, 1888-89.

Percentage  
of  
increase  
or  
decrease  
in  
1888-89.

### RAINFALL IN INCHES.

In comparison with 1887-88.		Total acres.	In comparison with 1887-88.		Percentage of increase or decrease in 1888-89.	Months.	1887-88.	1888-89.	Percentage of increase or decrease in 1888-89.
Increase.	Decrease.		Increase.	Decrease.			Inches.	Inches.	
10	11	12	13	14	15	16	17	18	19
555	...	108,043	...	12,734	- 10'46	...	...	...	...
565	877	21,597	...	3,408	- 13'63	...	...	...	...
...	...	637	560	...	+ 72'27	...	...	...	...
843	...	131,177	...	15,582	- 10'62	...	...	...	...
...	17,594	197,318	...	17,104	- 8'02	...	...	...	...
...	2,584	44,704	...	3,704	- 7'72	S.W. monsoon	11'62	11'32	- 3'44
565	...	637	560	...	+ 72'27	N.E. do.	35'65	17'89	- 49'61
...	20,013	242,259	...	20,338	- 7'74	TOTAL	47'27	29'21	- 38'21
...	23,044	136,542	...	30,703	- 18'36	...	...	...	...
...	11,848	81,936	...	22,601	- 21'62	S.W. monsoon	17'45	15'06	- 13'70
...	...	...	...	...	...	N.E. do.	17'51	12'46	- 28'84
...	34,892	218,478	...	53,304	- 19'61	TOTAL	34'96	27'52	- 21'28
12,403	...	103,512	...	2,253	- 2'13	...	...	...	...
806	...	28,893	...	1,597	- 5'24	S.W. monsoon	19'80	13'66	- 31'01
...	...	...	...	...	...	N.E. do.	6'31	6'59	+ 4'43
13,209	...	132,405	...	3,850	- 2'83	TOTAL	26'11	20'25	- 22'44
1,295	...	34,501	1,438	...	+ 4'35	...	...	...	...
246	...	13,009	...	217	- 1'64	S.W. monsoon	16'84	18'16	- 9'98
...	...	...	...	...	...	N.E. do.	5'59	4'83	- 13'59
1,541	...	47,510	1,221	...	+ 2'64	TOTAL	22'43	19'99	- 10'88
687	...	22,797	9,794	...	+ 75'32	...	...	...	...
...	1,047	11,089	4,099	...	+ 58'64	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	360	33,886	13,893	...	+ 69'49	...	...	...	...
...	5,854	29,558	...	10,524	- 26'5	...	...	...	...
468	...	27,168	...	4,451	- 17'37	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	5,392	50,726	...	14,975	- 22'79	...	...	...	...
...	5,167	54,355	...	730	- 1'37	...	...	...	...
...	585	32,257	...	352	- 1'08	S.W. monsoon	27'09	15'14	- 44'11
...	...	...	...	...	...	N.E. do.	4'59	5'58	+ 21'51
...	5,752	84,612	...	1,082	- 1'20	TOTAL	31'68	20'72	- 34'60
719	...	12,351	726	...	+ 6'25	...	...	...	...
39	...	2,581	152	...	+ 6'26	...	...	...	...
...	...	...	...	...	...	...	...	...	...
758	...	14,932	878	...	+ 6'25	...	...	...	...
1,950	...	9,307	1,695	...	+ 22'27	...	...	...	...
61	...	1,140	...	81	- 6'58	...	...	...	...
56	...	104	10	...	+ 6'49	...	...	...	...
2,087	...	10,620	1,624	...	+ 18'05	...	...	...	...
16,104	...	350,629	21,803	...	+ 6'57	...	...	...	...
...	3,175	64,842	...	12,263	- 15'90	...	...	...	...
212	...	2,531	...	154	- 5'74	...	...	...	...
13,141	...	421,002	9,386	...	+ 2'28	...	...	...	...

## Comparative Statement of Irrigation and Rainfall for the

Works.	Items.	Area of the district in acres.	Cultivable area in acres.	Cultivated area in acres.	AREAS			
					SOWN FROM APRIL TO NOVEMBER 1888, i.e., FIRST CROP.		SOWN 1888 TO SECOND	
					Total acres.	In comparison with 1887-88.		Total acres.
						Increase.	Decrease.	
1	2	3	4	5	6	7	8	9
TOTAL	Chingleput—contd							
	Government land	1,312,617	791,865	613,973	275,661	5,451	...	99,626
	Inam land	265,344	258,248	147,546	51,407	...	9,117	17,165
	Zemindari land	239,876	229,437	63,223	2,139	...	412	556
	TOTAL	1,817,837	1,279,550	824,732	329,207	...	4,078	117,347
Palar anicut	North Arcot.							
	Government land	...	...	...	58,578	8,796	...	22,928
	Inam land	...	...	...	7,274	...	288	3,963
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	65,852	8,508	...	26,891
All other works	Government land	...	...	...	231,995	48,764	...	171,983
	Inam land	...	...	...	30,219	2,156	...	16,418
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	262,214	51,120	...	128,771
TOTAL	Government land	2,411,716	1,154,507	884,664	290,573	57,560	...	134,881
	Inam land	206,524	158,485	125,531	37,493	2,068	...	20,781
	Zemindari land	2,179,840	...	...	...	...	...	...
	TOTAL	4,798,080	1,312,992	1,010,195	328,066	59,628	...	155,662
Pelendorai anicut.	South Arcot.							
	Government land	...	...	...	2,454	112	...	523
	Inam land	...	...	...	407	16	...	90
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	2,861	128	...	613
All other works	Government land	...	...	...	255,123	24,863	...	137,689
	Inam land	...	...	...	18,596	832	...	11,891
	Zemindari land	...	...	...	151	5	...	47
	TOTAL	...	...	...	273,870	25,700	...	149,627
TOTAL	Government land	3,110,357	2,320,985	1,236,049	257,577	24,975	...	138,212
	Inam land	156,843	142,403	89,955	19,003	848	...	11,981
	Zemindari land	22,400	14,080	6,585	151	5	...	47
	TOTAL	3,289,600	2,477,468	1,333,489	276,731	25,828	...	150,240
Upper anicut	Tanjore.							
	Government land	...	...	...	740,300	19,994	...	74,786
	Inam land	...	...	...	102,606	2,153	...	14,500
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	842,906	22,147	...	89,286
All other works	Government land	...	...	...	61,136	2,385	...	7,656
	Inam land	...	...	...	7,150	34	...	889
	Zemindari land	...	...	...	...	...	...	...
	TOTAL	...	...	...	68,286	2,409	...	8,545
TOTAL	Government land	1,590,693	1,163,085	967,429	801,416	22,379	...	82,441
	Inam land	611,662	461,982	257,349	109,756	2,177	...	15,389
	Zemindari land	191,633	147,466	60,771	...	...	...	...
	TOTAL	2,393,988	1,772,533	1,285,549	911,192	24,556	...	97,831
Trichinopoly.	Government land	2,422,565	1,289,666	817,168	100,348	...	3,236	51,599
	Inam land	214,235	174,398	114,584	3,961	...	1,722	6,286
	Zemindari land	391,680	321,071	...	22	9	...	5
	TOTAL	3,028,480	1,785,135	931,752	104,331	...	4,949	57,820

**SUPPLEMENT TO THE GAZETTE OF INDIA, DECEMBER 21, 1889. 1367**

*years 1887-88 and 1888-89 in the Madras Presidency—continued.*

**IRRIGATED.**

FROM DECEMBER  
MARCH 1889, i.e.,  
CROP.

**WHOLE YEAR, 1888-89.**

Percentage  
of  
Increase  
or  
Decrease  
in  
1888-89.

**RAINFALL IN INCHES.**

In comparison with 1887-88.		Total acres.	In comparison with 1887-88.		Percentage of Increase or Decrease in 1888-89.	Months.	1887-88.	1888-89.	Percentage of Increase or Decrease in 1888-89.
Increase.	Decrease.		Increase.	Decrease.					
10	11	12	13	14	15	16	17	18	19
18,773	...	375,287	24,224	...	+ 6.90	S.-W. monsoon N.-E. do.	Inches. 17.80	Inches. 21.52	+ 20.90
258	3,075	68,572	...	12,192	- 15.09		42.72	31.24	+ 32.26
15,966	...	446,554	11,888	...	+ 2.73	TOTAL	60.52	52.72	- 9.57
...	3,451	81,506	5,345	...	+ 7.02	...	...	...	...
533	...	11,237	245	...	+ 2.23	...	...	...	...
...	2,918	92,743	5,590	...	+ 6.41	...	...	...	...
5,974	...	343,948	54,738	...	+ 18.94	...	...	...	...
...	6,625	47,037	...	4,269	- 8.32	...	...	...	...
...	651	390,981	50,469	...	+ 14.82	...	...	...	...
2,523	...	425,454	60,083	...	+ 16.44	S.-W. monsoon N.-E. do.	17.17	20.12	+ 17.18
...	6,092	58,274	...	4,024	- 6.46		29.72	18.32	- 38.36
...	3,569	483,728	56,059	...	+ 13.11	TOTAL	46.89	38.44	- 18.02
46	...	2,977	158	...	+ 5.60	...	...	...	...
...	11	497	5	...	+ 1.92	...	...	...	...
35	...	3,474	163	...	+ 4.92	...	...	...	...
18,627	...	392,812	43,490	...	+ 12.45	...	...	...	...
1,291	...	30,487	2,123	...	+ 7.48	...	...	...	...
...	...	298	5	...	+ 2.59	...	...	...	...
19,918	...	423,497	45,618	...	+ 12.07	...	...	...	...
18,673	...	395,789	43,648	...	+ 12.39	S.-W. monsoon N.-E. do.	20.20	20.92	+ 3.56
1,280	...	30,984	2,128	...	+ 7.37		41.44	27.23	- 34.29
...	...	198	5	...	+ 2.59	TOTAL	61.64	48.15	- 21.28
19,953	...	426,971	45,781	...	+ 12.01	...	...	...	...
...	10,752	815,086	9,242	...	+ 1.13	...	...	...	...
989	...	117,106	3,142	...	+ 2.76	...	...	...	...
...	9,763	932,122	12,184	...	+ 1.35	...	...	...	...
...	2,721	68,792	...	336	- 0.48	...	...	...	...
...	134	8,039	...	110	- 1.35	...	...	...	...
...	2,855	76,831	...	446	- 0.58	...	...	...	...
...	13,473	883,878	8,906	...	+ 1.02	S.-W. monsoon N.-E. do.	15.10	15.39	+ 1.92
855	...	125,145	3,032	...	+ 2.48		42.06	31.66	- 24.73
...	12,618	1,009,023	11,938	...	+ 1.20	TOTAL	57.16	47.05	- 17.69
3,632	...	151,877	396	...	+ 0.26	S.-W. monsoon N.-E. do.	15.05	14.28	- 5.12
1,003	...	10,247	...	719	- 6.56		23.34	14.40	- 38.30
...	19	27	...	10	- 27.03	TOTAL	38.39	28.68	- 25.29
4,616	...	162,151	...	333	- 0.20	...	...	...	...

Comparative Statement of Irrigation and Rainfall for the

Works.	Items.	Area of the district in acres.	Cultivable area in acres.	Cultivated area in acres.	AREAS			
					SOWN FROM APRIL TO NOVEMBER 1888, i.e., FIRST CROP.		SOWN 1888 TO SECOND	
					Total acres.	In comparison with 1887-88.		Total acres.
						Increase.	Decrease.	
1	2	3	4	5	6	7	8	9
	<i>Madura.</i>							
	Government land	2,041,432	1,240,936	890,328	119,143	15,394	...	74,730
	Inam land .	219,888	204,763	81,355	10,026	...	275	7,871
	Zemindari land .	3,370,240	1,342,720	...	79	...	16	...
	TOTAL	5,631,560	2,788,419	971,683	129,248	15,393	...	82,610
Srivaikuntham anicut.	<i>Tinnevely.</i>							
	Government land	...	...	...	11,017	5,611	...	19,327
	Inam land .	...	...	...	582	292	...	1,139
	Zemindari land .	...	...	...	608	608	...	789
	TOTAL	...	...	...	12,207	6,511	...	21,255
All other works	Government land	...	...	...	78,108	1,041	...	190,321
	Inam land .	...	...	...	6,484	...	186	14,370
	Zemindari land .	...	...	...	12,255	...	46	9,225
	TOTAL	...	...	...	96,847	809	...	214,016
TOTAL	Government land	62,251,177	1,528,959	1,222,402	89,125	6,652	...	209,648
	Inam land .	200,955	237,633	191,187	7,066	100	...	15,309
	Zemindari land .	928,950	749,105	627,072	12,863	562	...	10,114
	TOTAL	3,450,082	2,515,697	2,040,661	109,054	7,320	...	235,271
	<i>Coimbatore.</i>							
	Government land	4,587,285	2,810,492	2,139,127	85,464	461	...	39,120
	Inam land .	336,215	322,842	258,892	8,357	569	...	3,432
	Zemindari land .	206,880	86,329	78,303	...	...	...	...
	TOTAL	5,030,400	3,219,663	2,497,322	93,821	1,030	...	32,552
Barur tank project.	<i>Salem.</i>							
	Government land	...	...	...	413	...	216	138
	Inam land .	...	...	...	34	...	56	20
	Zemindari land .	...	...	...	...	...	...	...
	TOTAL	...	...	...	447	...	272	158
All other works	Government land	...	...	...	86,261	...	6,611	30,995
	Inam land .	...	...	...	6,694	...	73	2,663
	Zemindari land .	...	...	...	274	...	2	...
	TOTAL	...	...	...	93,229	...	6,686	33,658
TOTAL	Government land	3,571,914	1,825,275	1,289,673	86,674	...	6,827	31,133
	Inam land .	259,606	230,781	80,579	6,728	...	129	2,383
	Zemindari land .	1,111,628	...	...	274	...	2	...
	TOTAL	4,943,148	1,962,056	1,370,252	93,676	...	6,958	33,516
TOTAL ANICUT	Government land	...	...	...	1,443,228	68,823	...	165,544
	Inam land .	...	...	...	388,667	37,530	...	37,605
	Zemindari land .	...	...	...	202,460	851	...	7,653
	TOTAL	...	...	...	2,034,355	107,204	...	210,802
TOTAL OF ALL OTHER WORKS	Government land	...	...	...	1,851,112	101,877	...	915,882
	Inam land .	...	...	...	325,715	...	21,856	173,113
	Zemindari land .	...	...	...	37,882	...	1,986	12,018
	TOTAL	...	...	...	2,214,909	78,335	...	1,100,413
GRAND TOTAL INCLUDING ANICUT AND OTHER WORKS	Government land	49,097,893	27,306,327	18,097,849	3,294,540	170,700	...	1,080,826
	Inam land .	7,872,522	7,108,048	4,839,683	714,382	15,974	...	210,718
	Zemindari land .	26,242,640	4,870,756	1,638,343	240,342	...	1,135	19,671
	TOTAL	84,113,061	39,285,131	24,575,875	4,249,264	185,539	...	1,311,215

# SUPPLEMENT TO THE GAZETTE OF INDIA, DECEMBER 21, 1889. 1369

years 1887-88 and 1888-89 in the Madras Presidency—concluded.

IRRIGATED						RAINFALL IN INCHES.			
FROM DECEMBER MARCH 1889, i.e., CROP.		WHOLE YEAR, 1888-89.		Percentage of Increase or Decrease in 1888-89.		Months.	1887-88.	1888-89	Percentage of Increase or Decrease in 1888-89.
In comparison with 1887-88.		Total acres.	In comparison with 1887-88.						
Increase.	Decrease.		Increase.	Decrease.					
10	11	12	13	14	15	16	17	18	19
10,840	...	193,882	26,414	...	+ 15.79	S.W. monsoon N.E. do.	Inches.	Inches.	
1,643	...	17,897	1,368	...	+ 8.28		10.72	9.08	- 15.30
...	...	79	...	16	- 15.84		21.79	21.87	+ 0.37
12,483	...	211,858	27,786	...	+ 15.09	TOTAL	32.51	30.95	- 4.79
...	1,477	30,344	4,131	...	+ 15.77		...	...	...
67	...	1,721	359	...	+ 26.36		...	...	...
...	28	1,397	580	...	+ 70.99		...	...	...
...	1,438	33,462	5,073	...	+ 17.87		...	...	...
4,242	...	268,429	5,283	...	+ 2.01		...	...	...
608	310	20,854	...	496	- 2.32		...	...	...
...	...	21,580	652	...	+ 3.12		...	...	...
4,610	...	310,863	5,439	...	+ 1.78		...	...	...
8,765	...	298,773	9,417	...	+ 3.25	S.W. monsoon N.E. do.	...	...	...
670	243	22,575	...	137	- 0.60		6.86	7.09	+ 3.35
...	...	22,977	1,232	...	+ 5.67		27.09	30.16	+ 11.33
3,192	...	344,325	10,512	...	+ 3.15	TOTAL	33.95	37.25	+ 9.72
8,056	...	114,584	8,517	...	+ 8.03	S.W. monsoon N.E. do.	...	...	...
...	110	11,789	459	...	+ 4.05		11.39	11.07	- 2.81
...	...	...	...	...	...		14.75	9.33	- 36.74
7,946	...	126,373	8,976	...	+ 7.65	TOTAL	26.14	20.40	- 21.95
...	92	551	...	308	- 35.85		...	...	...
6	...	...	...	30	- 48.08		...	...	...
...	...	...	...	...	...		...	...	...
...	86	603	...	358	- 37.17		...	...	...
4,300	...	117,256	...	2,311	- 1.93		...	...	...
...	1,058	9,057	...	1,131	- 11.10		...	...	...
...	4	274	...	6	- 2.14		...	...	...
3,238	...	126,587	...	3,448	- 2.65		...	...	...
4,202	...	117,807	...	2,619	- 2.17	S.W. monsoon N.E. do.	...	...	...
...	1,052	9,111	...	1,181	- 11.47		18.65	18.36	- 1.55
...	4	274	...	6	- 2.14		17.18	11.62	- 32.36
3,152	...	127,192	...	3,806	- 2.90	TOTAL	35.83	29.98	- 16.33
...	80,509	1,608,772	48,314	...	+ 3.21		...	...	...
245	...	420,272	37,775	...	+ 9.78		...	...	...
2,019	...	210,113	2,870	...	+ 1.38		...	...	...
...	18,245	2,245,157	88,959	...	+ 4.24		...	...	...
73,054	...	2,766,594	174,931	...	+ 6.60		...	...	...
2,026	...	498,828	...	18,630	- 3.59		...	...	...
1,181	...	49,900	...	805	- 1.59		...	...	...
77,161	...	3,315,322	155,496	...	+ 4.83		...	...	...
52,545	...	4,375,366	221,245	...	+ 5.38	S.W. monsoon N.E. do.	...	...	...
3,171	...	925,100	19,145	...	+ 2.11		19.33	16.20	- 16.19
3,200	...	260,013	2,065	...	- 0.80		20.43	15.59	- 23.69
58,916	...	5,560,479	244,455	...	- 4.59	TOTAL	39.76	31.79	- 20.04

P. RAJARATNA MUDALIAR,  
Secretary.

GOVERNMENT OF INDIA.  
DEPARTMENT OF FINANCE AND COMMERCE.

## RETAIL PRICES FOR THE 1st HALF OF NOVEMBER 1890.

[illegible]



## RETAIL PRICES FOR THE 1st HALF OF NOVEMBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHHOLU ( <i>Sorghum vulgare</i> ).		BAJRA OR COBBI ( <i>Pennisetum typhoides</i> ).		MARUA OR RAGI ( <i>Eleusine indica</i> ).		KANGRI OR KAKRI, ITALIAN WHEAT ( <i>Triticum italica</i> ).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA ( <i>Lycopersicon arvense</i> ).		MAIZE ( <i>Zea Mays</i> ).		ARAR, OR THUR, CAJAN PEA ( <i>Chickpea indica</i> ).		FIREWOOD.		SALT.			
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.
Bengal—continued.																												
Behar, south—																												
Monghyr	18 14	16 13	18 14	16 13	13 10	13 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gya.	14 12	14 12	18 0	15 8	16 8	15 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Patna.	18 0	16 2	21 0	21 8	16 0	16 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shahabad	14 0	14 0	20 0	17 0	9 6	9 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Behar, north—																												
Purneah	17 0	15 6	17 0	15 6	20 0	19 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhagalpur	17 0	15 6	17 0	15 6	16 0	15 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Darbhanga	16 0	15 8	14 13	13 13	20 0	19 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madhubani	12 8	13 5	13 8	13 8	14 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Morehpore	13 8	14 12	19 8	20 0	8 8	8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saran	13 8	14 12	19 8	20 0	8 8	8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Champaran	12 0	14 8	12 0	16 0	18 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
N.W. Provinces—																												
Benares—																												
Muzaffarpur	13 0	13 0	18 0	16 0	8 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benares	14 6	14 6	19 4	19 4	9 3	9 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ghazipur	14 6	14 6	17 2	17 2	7 2	7 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jaunpur	14 8	14 6	21 0	21 0	7 0	7 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Altabad	13 8	13 8	19 0	19 0	7 0	7 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central—																												
Banda	16 4	15 4	20 8	20 8	7 6	7 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fatehpur	14 4	14 4	21 0	21 0	14 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	17 8	16 0	...	...	13 0	13 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jaunpur	17 0	17 0	22 0	22 0	8 8	8 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cawnpore	16 8	16 4	23 0	23 0	6 0	6 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ghazipur	16 12	16 12	24 0	24 0	5 0	5 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Farukhabad	16 4	16 0	24 0	24 0	4 8	4 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	16 12	16 12	23 0	23 0	4 8	4 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Etah	17 4	16 12	24 0	22 8	7 8	7 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western—																												
Lalitpur	19 0	16 0	24 0	20 8	9 0	9 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jaunpur	17 14	17 0	23 15	22 0	5 0	5 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Agra	15 0	15 0	21 0	21 0	7 0	7 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	15 0	15 0	21 0	21 0	7 0	7 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Aligarh	15 0	15 0	21 0	21 0	7 0	7 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unnao	17 12	16 8	22 8	22 8	5 5	5 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	17 8	17 8	25 0	25 0	5 5	5 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sub-montane—																												
Balia	15 0	15 0	16 12	16 12	9 8	9 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Azangpur	12 8	12 8	17 11	17 11	8 14	8 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gorakhpur	12 9	12 9	16 3	16 3	8 14	8 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Beni	16 0	16 8	19 8	19 8	8 8	8 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shahjahanpur	18 0	17 8	26 8	26 8	8 8	8 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kanpur	17 0	17 0	28 8	28 8	12 8	12 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meerut	17 0	17 0	28 8	28 8	12 8	12 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...



[illegible]

**Six pins per bundle.**

**Not procurable.**

**FRONT** •

## RETAIL PRICES FOR THE 1st HALF OF NOVEMBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUNBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine coracana).		KANKANI OR KAKUM, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer aridinum).		MAIZE (Zea Mays).		ASHRA, OR TRUE, CADIAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past	Present	Past
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
<b>Punjab—</b>																										
<i>Southern—</i>																										
Hissar	18 0	18 0	26 0	26 0	10 0	10 0	25 0	24 0	22 0	23 0	23 0	26 0	27 0	26 0	26 0	26 0	26 0	26 0	17 0	17 0	11 0	11 0	150 0	150 0	11 0	11 0
Ferozepore	20 0	21 0	38 0	36 0	9 0	9 0	30 0	28 0	26 0	24 0	24 0	32 0	32 0	32 0	32 0	32 0	32 0	32 0	30 0	30 0	11 0	11 0	100 0	100 0	23 4	23 4
Mongomery	20 0	18 0	28 0	28 0	10 0	10 0	28 0	28 0	26 0	26 0	26 0	28 0	28 0	28 0	28 0	28 0	28 0	28 0	25 0	24 0	11 0	11 0	200 0	200 0	11 0	11 0
<i>Central—</i>																										
Gurgaon	16 0	16 0	25 0	26 0	9 0	10 0	25 0	25 0	21 0	21 0	21 0	23 0	23 0	23 0	23 0	23 0	23 0	23 0	24 0	24 0	20 0	20 0	130 0	130 0	11 0	11 0
Delhi	17 0	17 0	24 0	24 0	12 0	12 0	24 0	24 0	18 0	18 0	18 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	24 0	24 0	80 0	80 0	11 0	11 0
Rohtak	18 0	17 0	22 0	23 0	10 0	12 0	23 0	23 0	20 0	20 0	20 0	24 0	24 0	24 0	24 0	24 0	24 0	24 0	18 0	18 0	20 0	20 0	120 0	120 0	10 0	10 0
Karnal	17 0	17 0	26 0	23 0	11 0	11 0	23 0	23 0	17 0	16 0	16 0	22 0	22 0	22 0	22 0	22 0	22 0	22 0	27 0	28 0	20 0	20 0	120 0	120 0	10 0	10 0
Lahore	20 0	19 0	35 0	35 0	11 0	11 0	30 0	29 0	18 0	18 0	18 0	30 0	30 0	30 0	32 0	32 0	30 0	30 0	28 0	27 0	12 0	12 0	85 0	85 0	13 0	13 0
<i>Sub-montane—</i>																										
Umballa	20 0	20 0	24 0	24 0	12 0	12 0	20 0	20 0	15 0	17 0	17 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	26 0	26 0	20 0	20 0	120 0	120 0	13 0	13 0
Ludhiana	30 0	31 0	32 0	36 0	8 0	12 0	28 0	28 0	20 0	22 0	22 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	27 0	27 0	14 0	14 0	110 0	110 0	13 0	13 0
Jullundur	21 0	21 0	32 0	32 0	8 0	8 0	27 0	26 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	30 0	30 0	16 0	16 0	100 0	100 0	13 0	13 0
Ferozepore	22 0	22 0	32 0	32 0	10 0	10 0	27 0	26 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	27 0	27 0	16 0	16 0	100 0	100 0	13 0	13 0
Gurdaspur	23 0	23 0	32 0	32 0	13 0	12 0	20 0	20 0	14 0	14 0	14 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	28 0	28 0	10 0	10 0	120 0	120 0	13 0	13 0
Amritsar	21 0	21 0	31 0	31 0	11 0	11 0	27 0	25 0	16 0	16 0	16 0	23 0	23 0	23 0	23 0	23 0	23 0	23 0	25 0	24 0	13 0	13 0	90 0	90 0	13 0	12 0
<i>Hills—</i>																										
Simla	15 0	15 0	20 0	20 0	9 0	8 0	15 0	15 0	11 0	11 0	11 0	10 0	10 0	10 0	8 0	8 0	10 0	10 0	20 0	20 0	10 0	10 0	65 0	65 0	8 0	8 0
Kangra	20 0	20 0	28 0	28 0	14 0	12 0	16 0	16 0	10 0	10 0	10 0	20 0	20 0	20 0	8 0	8 0	12 0	12 0	22 0	22 0	12 0	12 0	100 0	100 0	11 0	11 0
<i>North-western—</i>																										
Sialkot	22 0	22 0	40 0	40 0	15 0	14 0	32 0	30 0	25 0	25 0	25 0	24 0	24 0	24 0	35 0	34 0	28 0	28 0	28 0	28 0	12 0	12 0	180 0	180 0	13 0	13 0
Gujranwala	20 0	21 0	40 0	40 0	12 0	11 0	30 0	28 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	20 0	26 0	25 0	12 0	12 0	85 0	85 0	13 0	13 0
Gorakhpur	22 0	22 0	35 0	35 0	11 0	12 0	30 0	30 0	28 0	28 0	28 0	27 0	27 0	27 0	12 0	12 0	26 0	26 0	26 0	25 0	12 0	12 0	120 0	120 0	14 0	14 0
Jhelum	23 0	23 0	34 0	34 0	14 0	14 0	25 0	25 0	27 0	27 0	27 0	26 0	26 0	26 0	16 0	16 0	26 0	26 0	26 0	25 0	12 0	12 0	100 0	100 0	14 0	14 0
Rawalpindi	21 0	22 0	47 0	50 0	13 0	7 0	40 0	40 0	26 0	26 0	26 0	26 0	26 0	26 0	16 0	16 0	26 0	26 0	29 0	30 0	20 0	20 0	60 0	60 0	13 0	13 0
Hazara	23 0	23 0	44 0	42 0	10 0	10 0	17 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	14 0	14 0	22 0	22 0	36 0	35 0	20 0	20 0	80 0	80 0	11 0	11 0
Peshawar	23 0	22 0	49 0	48 0	11 0	11 0	44 0	44 0	25 0	25 0	25 0	25 0	25 0	25 0	21 0	21 0	25 0	24 0	37 0	34 0	20 0	20 0	90 0	90 0	30 0	30 0
Kohat	24 0	22 0	53 0	48 0	15 0	16 0	44 0	44 0	32 0	35 0	35 0	35 0	35 0	35 0	21 0	21 0	35 0	35 0	35 0	35 0	11 0	11 0	125 0	125 0	55 0	55 0
<i>Western—</i>																										
Shahpur	24 0	23 0	35 0	36 0	10 0	10 0	28 0	26 0	26 0	26 0	26 0	26 0	26 0	26 0	20 0	20 0	31 0	31 0	27 0	26 0	10 0	10 0	240 0	240 0	13 0	13 0
Jhang	20 0	20 0	31 0	32 0	8 0	9 0	27 0	26 0	24 0	24 0	24 0	24 0	24 0	24 0	22 0	22 0	21 0	21 0	24 0	23 0	10 0	10 0	200 0	200 0	12 0	12 0
Moolan	16 0	16 0	24 0	25 0	10 0	10 0	23 0	23 0	21 0	21 0	21 0	21 0	21 0	21 0	22 0	22 0	22 0	22 0	22 0	20 0	13 0	13 0	100 0	100 0	12 0	12 0
Bannu	30 0	29 0	55 0	44 0	16 0	15 0	40 0	40 0	34 0	34 0	34 0	35 0	35 0	35 0	9 0	9 0	35 0	35 0	48 0	44 0	13 0	13 0	70 0	70 0	40 0	40 0
D. I. Khan	21 0	22 0	39 0	39 0	9 0	9 0	30 0	30 0	29 0	29 0	29 0	29 0	29 0	29 0	6 0	6 0	27 0	27 0	22 0	22 0	15 0	15 0	100 0	100 0	45 0	45 0
Muzaffargarh	18 0	18 0	26 0	27 0	8 0	8 0	18 0	18 0	18 0	18 0	18 0	18 0	18 0	18 0	10 0	10 0	10 0	10 0	15 0	15 0	11 0	11 0	110 0	110 0	11 0	11 0
D. G. Khan	16 0	16 0	24 0	24 0	8 0	8 0	25 0	25 0	23 0	23 0	23 0	23 0	23 0	23 0	18 0	18 0	18 0	18 0	15 0	15 0	11 0	11 0	125 0	125 0	27 0	27 0
<b>Sindh and Beluchistan—</b>																										
Karachi	12 0	12 0	18 0	16 0	10 0	8 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	12 0	12 0	18 0	18 0	16 0	16 0	6 0	6 0	90 0	90 0	13 0	13 0
Hyderabad (Gidu Bandar)	12 0	12 0	14 0	16 0	12 0	7 0	21 0	21 0	19 0	19 0	19 0	19 0	19 0	19 0	12 0	12 0	15 0	15 0	16 0	16 0	11 0	11 0	160 0	160 0	11 0	11 0
Thar and Parkar (Umar Kot)	13 0	13 0	...	...	13 0	13 0	...	...	13 0	13 0	13 0	13 0	13 0	13 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	120 0	120 0	12 0	12 0
Sukkur	15 0	15 0	22 0	20 0	13 0	9 0	24 0	24 0	21 0	21 0	21 0	21 0	21 0	21 0	10 0	10 0	20 0	20 0	19 0	19 0	11 0	11 0	160 0	160 0	11 0	11 0
Shikarpur	12 0	12 0	19 0	19 0	9 0	8 0	20 0	20 0	22 0	22 0	22 0	22 0	22 0	22 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	10 0	150 0	150 0	11 0	11 0
Upper Sind Frontier	13 0	13 0	10 0	10 0	12 0	7 0	28 0	28 0	25 0	25 0	25 0	25 0	25 0	25 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	160 0	160 0	11 0	11 0
Quetta	12 0	12 0	15 0	14 0	7 0	5 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	16 0	7 0	7 0	14 0	14 0	12 0	12 0	12 0	12 0	45 0	45 0	8 0	8 0

		1	2	3	4	5	6	7	8	9	10	11	12
Bombay— Konkan—	Karwar	11 8	10 8	10 8	10 8	10 8	10 8	10 8	10 8	10 8	10 8	10 8	10 8
	Ratnagiri	9 14	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9 4
	Colaba (Alibag)	9 13	9 13	9 13	9 13	9 13	9 13	9 13	9 13	9 13	9 13	9 13	9 13
	Bombay	10 8	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6
	Tanna (Salsette)	10 8	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6	10 6
Deccan—	Dhavar (Hudli)	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
	Belgaum	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
	Satara	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
	Sholapur	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
	Blisar	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
Khandesh—	Purna (City)	13 10	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8
	Ahmednagar	14 0	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8	13 8
	Nashik	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
	Khandesh (Dhulia)	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0	15 0
	...	...	...	...	...	...	...	...	...	...	...	...	...
Guzerat—	Surat	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
	Broach	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
	Kaira	13 14	13 14	13 14	13 14	13 14	13 14	13 14	13 14	13 14	13 14	13 14	13 14
	Baroda Camp (Saday Bazar)	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
	Ahmedabad (Masrohi)	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0	12 0
Kashmir—	Panch Mahals (Godhra)	12 2	12 2	12 2	12 2	12 2	12 2	12 2	12 2	12 2	12 2	12 2	12 2
	Dessa Cantonment	14 13	15 8	17 8	17 8	17 8	17 8	17 8	17 8	17 8	17 8	17 8	17 8
	...	...	...	...	...	...	...	...	...	...	...	...	...
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Central Provinces—	...	...	...	...	...	...	...	...	...	...	...	...	...
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Madras—	...	...	...	...	...	...	...	...	...	...	...	...	...
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Bengal—	...	...	...	...	...	...	...	...	...	...	...	...	...
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Firewood is sold by head-loads, cart-loads, and bullock-loads.

Not procurable.

Not produced.

Not sold.

## RETAIL PRICES FOR THE 1st HALF OF NOVEMBER 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR BARI (Eleusine indica).		KANGRI OR KAKRI (Scleria italica).		GRAM, CHENNA, CHOLA, KADALAI OR SUSAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR, OR THEA, CADIAN, PVA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.
Madras—																										
Malabar Coast—																										
Malabar	8 10	8 10	...	...	10 8	10 14	11 5	11 15	...	...	...	...	20 6	20 6	...	...	...	...	...	...	...	...	136 2	136 2	11 11	11 11
S. Canara	8 2	8 2	...	...	9 6	9 14	12 13	11 5	...	...	...	...	21 13	19 5	...	...	...	...	...	...	...	...	128 13	128 13	13 5	13 5
South, central—																										
Coimbatore	11 2	11 2	...	...	12 3	12 3	13 2	13 2	23 2	23 2	23 2	23 2	26 3	26 3	...	...	...	...	...	...	...	...	133 10	133 10	11 11	11 11
Ningins	10 11	10 11	...	...	8 13	8 13	10 6	10 6	20 0	20 0	10 13	10 13	20 14	20 14	...	...	...	...	...	...	...	...	161 13	161 13	10 2	10 2
Salem	10 11	10 11	...	...	12 11	12 11	13 11	13 11	28 14	27 10	27 2	26 3	31 10	30 13	...	...	...	...	...	...	...	...	186 10	186 10	13 2	13 2
Central—																										
Bellary	13 6	13 6	...	...	11 13	11 13	13 3	13 3	28 5	28 5	22 2	22 2	33 0	34 6	...	...	...	...	...	...	...	...	85 2	85 2	11 14	11 14
Anantapur	10 10	10 10	...	...	12 13	12 13	14 0	14 0	31 6	33 0	30 2	30 2	34 0	34 0	...	...	...	...	...	...	...	...	97 3	97 3	11 5	11 5
Cuddapah	12 8	12 8	...	...	12 0	12 0	12 8	12 8	23 11	23 11	31 14	31 14	33 0	31 8	...	...	...	...	...	...	...	...	140 0	140 0	12 2	12 2
Kernool	10 8	10 8	...	...	9 14	10 5	11 2	11 2	25 6	25 6	25 0	25 0	25 13	25 13	...	...	...	...	...	...	...	...	142 14	142 14	11 11	10 14
East Coast, north—																										
Ganjam	8 14	8 14	...	...	21 0	9 8	11 8	10 8	...	...	...	...	24 10	24 10	...	...	...	...	...	...	...	...	121 5	121 5	12 13	12 13
Vizagapatnam	11 0	10 8	...	...	10 2	10 2	13 14	13 14	28 10	27 0	32 11	29 11	25 5	24 3	...	...	...	...	...	...	...	...	116 10	116 10	11 11	11 11
Godavari	9 8	9 0	...	...	14 14	15 15	16 0	16 0	30 11	30 11	28 11	29 14	32 13	36 6	...	...	...	...	...	...	...	...	243 0	243 0	12 0	12 0
East Coast, central—																										
Kistna	10 6	10 6	...	...	13 9	13 11	13 13	14 5	19 0	19 0	...	...	25 5	23 13	...	...	...	...	...	...	...	...	170 2	170 2	13 3	13 3
Nellore	12 8	11 8	...	...	13 13	13 13	14 13	14 13	24 11	23 11	18 13	...	28 13	23 13	...	...	...	...	...	...	...	...	93 5	93 5	12 13	12 13
East Coast, south—																										
Madras—																										
Chingleput	10 10	10 13	...	...	11 3	11 8	12 0	12 6	20 14	20 8	21 3	21 13	27 0	27 11	...	...	...	...	...	...	...	...	97 10	97 10	12 5	12 5
N. Arcot	9 6	10 2	...	...	11 5	12 0	12 2	12 13	...	...	17 3	17 3	23 5	24 11	...	...	...	...	...	...	...	...	122 8	122 8	12 6	12 6
S. Arcot	8 10	8 2	...	...	12 3	11 10	13 3	13 3	32 13	32 13	28 0	28 0	34 3	36 13	...	...	...	...	...	...	...	...	194 6	194 6	11 5	11 5
Tanjore	8 13	8 13	...	...	13 5	13 11	15 14	16 5	20 11	20 11	22 5	26 0	23 2	23 13	...	...	...	...	...	...	...	...	209 0	209 0	11 11	11 11
Tschinopoly	8 10	8 10	...	...	11 14	12 3	12 5	12 11	25 3	25 3	27 14	27 14	28 13	28 13	...	...	...	...	...	...	...	...	166 3	166 3	12 14	12 14
Southern—																										
Tinnevely	8 8	8 8	...	...	11 2	11 2	12 6	13 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	143 6	143 6	13 0	13 0
Madura	9 13	9 11	...	...	11 13	11 13	12 5	12 8	25 14	25 14	23 8	23 8	27 14	27 14	...	...	...	...	...	...	...	...	131 3	131 3	14 13	14 13
Mysore—																										
Mysore	10 0	10 0	10 4	10 4	9 8	9 8	11 0	10 8	47 0	47 0	19 0	18 0	31 0	30 0	...	...	...	...	...	...	...	...	87 0	87 0	8 0	8 0
Bangalore	11 8	11 8	11 14	11 14	9 8	9 8	10 8	10 8	25 0	25 0	...	...	34 0	34 2	...	...	...	...	...	...	...	...	84 0	84 0	9 8	9 8
Kolar	10 8	10 8	10 10	10 10	10 0	10 0	12 0	12 8	27 0	27 0	...	...	44 0	40 0	...	...	...	...	...	...	...	...	144 0	144 0	10 0	10 0
Tumkur	10 8	10 8	11 0	11 0	11 0	11 0	12 0	12 0	...	...	...	...	44 0	40 0	...	...	...	...	...	...	...	...	340 0	340 0	9 8	9 8
Hasan	10 0	10 0	11 0	11 0	11 0	11 0	13 0	13 0	...	...	...	...	40 0	40 0	...	...	...	...	...	...	...	...	72 0	72 0	8 0	8 0
Kadur	10 0	10 0	11 0	11 0	12 0	12 0	16 0	16 0	...	...	...	...	40 0	40 0	...	...	...	...	...	...	...	...	240 0	240 0	8 0	8 0
Shimoga	10 8	10 8	11 0	11 0	10 8	10 8	14 11	15 12	31 8	31 10	...	...	43 1	47 4	...	...	...	...	...	...	...	...	480 0	480 0	8 6	8 6
Chitaldrug	12 0	12 0	13 0	13 0	11 0	11 0	13 0	13 0	48 0	48 0	32 0	32 0	60 0	60 0	...	...	...	...	...	...	...	...	320 0	320 0	8 0	8 0
Coorg—																										
Coorg	9 0	9 0	8 0	8 0	12 8	12 8	14 8	15 0	...	...	...	...	37 0	35 0	...	...	...	...	...	...	...	...	110 0	110 0	8 8	8 8
Aden	8 0	8 0	...	...	6 3	6 3	8 0	8 0	10 3	10 3	9 4	9 4	...	...	...	...	...	...	...	...	...	...	63 5	63 5	33 6	32 0

\* Not sold.

DEPARTMENT OF FINANCE AND COMMERCE,  
(Statistical Branch).J. F. FINLAY,  
Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXXIV of 1889-90.

## APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.		RAILWAYS.	WEEK ENDING 24TH NOVEMBER, 1888.			WEEK ENDING 23RD NOVEMBER, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 24TH NOVEMBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 23RD NOVEMBER, 1889.		Total Increase in 1889-90.	Total Decrease in 1889-90.	
			Total length open.	RECEIPTS.		Total length open.	RECEIPTS.		Total.	Per mile open per week.	Total.	Per mile open per week.			
				Total.	Per mile open.		Total.	Per mile open.							
		State Lines worked by Companies		R	R		R	R		R	R		R	R	
30th Nov., 1889	East Indian	1,314	9,79,468	647	1,336	(a) 9,26,089	607	2,75,76,241	536	(a) 2,75,00,118	532	16,872	...	...	
30th ditto	Patna-Giya	57	10,171	178	57	9,247	162	3,25,293	167	3,18,727	164	...	...	6,566	
...	Dildarnagar-Ghazipur	12	927	77	...	(b) 41,614	...	41,614	102	(b) 41,614	...	...	...	41,614	
...	Sindia	75	5,801	79	...	(c) 2,30,552	90	2,30,552	90	(c) 2,30,552	...	...	...	2,30,552	
30th Nov., 1889	Rajputana-Malwa	1,664	3,77,133	227	1,672	3,85,000	230	1,16,11,092	205	1,22,03,429	216	5,92,437	...	...	
30th ditto	Bengal-Nagpur (d)	183	28,298	155	305	(d) 39,336	119	9,15,269	145	(d) 11,10,348	108	1,95,079	...	...	
30th ditto	Southern Mahratta (f)	854	83,058	97	978	75,095	77	25,54,225	88	26,05,595	87	53,340	...	...	
30th ditto	Ditto Mysore Section	140	12,048	86	296	20,586	70	3,85,470	81	6,12,071	71	2,26,601	...	...	
30th ditto	Indian Midland	136	8,987	66	746	(e) 83,170	111	4,27,209	92	(e) 18,94,193	82	1,46,464	...	...	
30th ditto	Villupuram-Guntakal	83	4,920	59	83	4,059	49	1,61,917	59	1,61,600	59	...	...	227	
30th ditto	Nellore Branch	36	2,706	75	36	3,024	101	53,010	45	65,924	55	12,288	...	...	
30th ditto	Bareilly-Pilibhit	36	2,706	75	36	3,024	101	53,010	45	65,924	55	12,288	...	...	
		TOTAL	4,754	15,13,617	318	5,699	15,43,803	271	4,42,80,513	274	4,65,63,035	251	22,82,522	...	...
		State Lines worked by Government.													
30th Nov., 1889	North-Western (h)	2,412	5,83,805	243	2,477	6,37,645	261	1,64,85,968	201	1,79,42,577	214	14,56,609	...	...	
30th ditto	Oudh and Rohilkhand	192	1,40,812	203	692	1,40,066	211	43,72,328	186	48,30,143	206	4,58,765	...	...	
30th ditto	Bengal Central	125	16,972	130	125	11,250	90	4,77,330	112	4,95,352	117	18,022	...	...	
30th ditto	Wartha Coal	45	24,102	520	45	16,431	365	5,07,350	341	5,03,559	330	...	...	3,691	
30th ditto	Eastern Bengal	673	2,63,327	391	747	2,71,000	363	68,00,572	382	71,27,042	392	2,28,070	...	...	
30th ditto	Nailhati	27	2,254	83	27	1,700	63	64,916	72	62,445	69	...	...	2,501	
30th ditto	Tinokot	273	45,512	167	273	43,531	159	10,67,117	123	12,37,209	137	1,70,152	...	...	
30th ditto	Lucknow-Sitapur-Sihramau	105	4,701	45	105	5,313	51	1,62,942	46	2,03,553	57	40,611	...	...	
30th ditto	Jorhat	31	1,556	50	25	948	38	39,922	38	40,107	47	245	...	...	
30th ditto	Cherra-Companyganj	7	267	38	7	305	56	5,153	22	6,572	28	1,419	...	...	
30th ditto	Burma (i)	441	63,146	143	553	74,851	135	18,68,264	149	20,38,080	162	10,30,816	...	...	
		TOTAL	4,830	11,48,423	238	5,076	12,19,129	240	3,19,85,842	198	3,53,03,359	207	34,07,517	...	...
		Lines worked by Guaranteed Companies.													
30th Nov., 1889	Madras	849	1,64,204	195	840	1,77,202	211	55,28,157	194	60,29,405	212	5,01,246	...	...	
30th ditto	South Indian	654	98,699	151	654	95,633	146	36,13,734	163	37,77,767	171	1,64,043	...	...	
30th ditto	Great Indian Peninsula	1,504	(j) 7,79,437	518	1,447	(k) 8,48,472	586	(l) 12,58,39,273	507	(k) 2,05,52,541	421	...	...	52,86,733	
30th ditto	Bombay, Baroda and Central India (l)	461	2,45,837	533	461	2,48,000	538	78,45,221	501	80,29,729	514	1,84,508	...	...	
		TOTAL	3,459	12,88,177	372	3,402	13,69,307	403	4,28,26,375	364	3,83,99,441	333	...	...	44,36,934
GRAND TOTAL (GUARANTEED AND STATE)			13,043	39,50,289	303	14,177	41,32,329	291	1,00,92,730	270	1,20,34,585	255	12,53,105	...	...
GROSS ESTIMATED EXPENSES			...	...	...	...	...	...	6,21,64,803	141	6,29,39,877	133	7,74,074	...	...
NET RECEIPTS			...	...	...	...	...	...	5,00,20,027	129	5,74,05,958	122	4,73,031	...	...
		Assisted Companies													
30th Nov., 1889	Tarakshwar	92	5,978	272	22	4,384	199	1,65,318	245	1,77,541	238	...	...	5,832	
30th ditto	Dihoo-Sadiya	...	...	...	...	(m) 2,81,852	...	(n) 2,81,852	110	(o) 3,04,415	118	21,563	...	...	
30th ditto	Bengal and North-Western	376	52,821	140	376	39,840	106	14,79,363	116	15,30,176	130	5,01,813	...	...	
30th ditto	Rohilkhand-Kumaon	67	4,558	68	97	6,723	100	2,46,025	111	2,71,426	123	25,401	...	...	
		TOTAL	495	93,357	136	495	50,947	110	21,91,618	119	22,83,358	124	91,740	...	...
		Native States.													
30th Nov., 1889	His Highness the Nizam's Guaranteed	310	40,563	31	354	49,980	141	16,87,166	109	14,93,242	125	4,06,076	...	...	
30th ditto	His Highness the Gaekwar's	59	4,587	78	59	2,670	38	80,688	43	86,226	43	...	...	462	
30th ditto	His Highness the Gaekwar's Viramgam	21	748	36	27	950	35	20,209	41	33,801	37	4,592	...	...	
30th ditto	Mehsana-Vadnagar	208	24,177	116	329	24,034	73	6,49,267	56	8,28,814	89	1,79,547	...	...	
30th ditto	Bhavanagar-Gondal	68	2,903	43	68	2,866	42	1,11,782	48	1,22,052	53	10,270	...	...	
30th ditto	Junagadh-Portbandar	124	6,400	52	124	6,600	55	2,23,033	53	2,20,427	53	...	...	3,606	
		TOTAL	791	79,328	100	901	86,960	90	21,88,145	84	27,84,862	91	5,96,717	...	...

(a) Includes the Dildarnagar-Ghazipur State Railway.

(b) Included with East Indian Railway.

(c) Included with Indian Midland Railway.

(d) Includes the Bulhary-Kisna Branch.

(e) Includes the Sanctoria Coal Section of the Bengal-Nagpur Railway.

(f) Includes the Bulhary-Kisna State Railway.

(g) Includes the Sindia and Bhopal-Itarsi State Railways.

(h) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(i) Includes the Toungoo-Mandalay extension.

(j) Includes the Dhond-Mannad, Khamsaon, Amraoti and Bhopal-Itarsi State Railways.

(k) Includes the Dhond-Mannad, Khamsaon and Amraoti State Railways.

(l) Includes the Patni Branch.

(m) Return not received.

(n) Total receipts from 1st April to 17th November 1888.

(o) Total receipts from 1st April to 16th November 1889.

M. C. BRACKENBURY, Major, R.E.,  
Under-Secretary.

CALCUTTA,  
The 19th December, 1889.

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# SUPPLEMENT TO The Gazette of India.

No. 52. } CALCUTTA, SATURDAY, DECEMBER 28, 1889.

## OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

### GOVERNMENT OF INDIA.

### PUBLIC WORKS DEPARTMENT.

### CIVIL WORKS.

### Telegraph.

### ADMINISTRATION REPORT OF THE INDO-EUROPEAN TELEGRAPH DEPARTMENT FOR THE YEAR 1888-89.

No. 308 T., dated Calcutta, the 19th December, 1889.

RESOLUTION—By the Government of India, Public Works Department.

Read—

Letter from the Director-General of Telegraphs, No. 164 I. E., dated the 19th November 1889, and its enclosure, the Report for 1888-89.

OBSERVATIONS.—The Capital Account of the Indo-European Telegraph Department was decreased by sales of stores, &c., by Rs. 40,230 during the year 1888-89. The Capital Account stood at Rs. 1,12,41,365 at the end of the year.

2. The receipts for the last four years have been—

	Rs.
1885-86	10,19,284
1886-87	10,03,795
1887-88	10,35,235
1888-89	11,44,600

The figures now given for 1887-88 differ slightly from those given in the previous year's report; the difference is due to the fact that the figures have been revised on the basis of the Administrative Accounts.

The increase in revenue is mainly due to the fact that traffic was diverted to the Indo-European route in consequence of a break in the Eastern Company's cables, which occurred for 32 days from 14th August to the 11th September 1888. This prolonged break threw a severe strain on the staff of both the Persian and Persian Gulf Sections of the Indo-European Department.

3. The working expenses of the year were Rs. 9,58,223, and the net revenue was Rs. 1,91,377. In the previous year, the Department worked at a profit of Rs. 1,98,381.

## 4. The working expenses of the last four years have been as follows :—

YEAR.	REPAIRS.		Cable Steamer.	Miscella- neous.	Establish- ment.	Tools and Plant.	Administra- tive charges.	Total.
	Ordinary.	Extra- ordinary.						
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86	1,38,024	7,63,808	1,32,686	19,765	5,29,243	46,668	...	16,20,074
1886-87	1,75,888	778	1,09,944	14,487	5,30,488	38,944	...	8,65,629
1887-88	1,21,538	...	1,13,660	36,299	5,18,816	44,944	1,560	8,39,836
1888-89	2,29,925	...	1,08,487	18,859	5,28,618	83,590	86,574	9,65,228

The increase in the expenditure of the year under review was mainly due to extensive repairs and renewals of the cables which had been laid in 1864. These had been previously repaired, here and there, in short lengths, so that the cables consisted of many short lengths of new cables connected by old pieces. This rendered repairs difficult and expensive, as the pieces of new cable had to be raised when old lengths required repair, and this strained and otherwise injured the new pieces. It was therefore decided to lift and thoroughly repair the 1864 cables throughout, at a cost of Rs. 7,03,000, to be distributed over three or four years. During last year, 201 knots of cable were expended in renewals and repairs.

5. The traffic transmitted during the year was considerably in excess of that of 1887-88. State messages were practically the same, but commercial and private messages increased by about 30 per cent., and press messages were more by 50 per cent. than those of the previous year. The average length of messages was about the same as last year—12.5 words per message.

6. There was no total interruption on the Persian Gulf Section, i.e., no simultaneous break of cables and of land line at the same time, during the year, and although there was a long interruption on the Gwadar-Karachi cable in August and September 1888, the traffic was passed by the other lines; so that throughout the year there was no break on the Persian Gulf Section between Karachi and Bushire which affected communication with Europe. On the Persian Section the interruptions, owing to the severity of the winter, were rather in excess of those of the previous year, and the period of total interruption, mainly due to a great snowstorm at Shiraz, amounted to 50 hours 46 minutes.

7. The average speed of transmission of the three routes between England and Calcutta has been—

	Via Teheran. H. M.	Via Turkey. H. M.	Via Suez. H. M.
1888-89	2 24	19 28	3 2
1887-88	1 11	16 11	2 42
1886-87	1 31	13 23	2 31

The decrease in speed in the Teheran route was due to the break on the Eastern Company's cable in August and September 1888, and to the fact that, for part of that time, only one circuit was available on the Indo-European route.

8. The Indo-European Telegraph Department has been under the charge of the Director General of Telegraphs, Colonel Mallock, during, practically, the whole year. During the cold weather of 1888-89 he visited Persia and personally inspected the lines and stations, with the object of proposing measures for consolidating the amalgamation of the Indo-European and the Indian Telegraph Departments. The thanks of Government are due to him for his administration of this branch of his Department.

ORDER.—Ordered, that a copy of this Resolution be forwarded to the Director General of Telegraphs for information and guidance.

Also that copies of the Report and Resolution be forwarded to the Department of Finance and Commerce and the Home Department for information.

Also to the Government of Bombay for information.

Ordered further, that the Report and the Resolution be forwarded to the Secretary of State for the information of Her Majesty's Government, and published in the *Gazette of India*.

R. O. B. PEMBERTON, Colonel, R.E.,  
Secretary to the Govt. of India.



# ADMINISTRATION REPORT

## OF

# THE INDO-EUROPEAN TELEGRAPH DEPARTMENT

## FOR

# 1888-89.

### CAPITAL AND REVENUE ACCOUNT.\*

**Capital.**—The Capital of the Department was reduced by Rs 40,230 and stood, on the 31st March 1889, at Rs 1,12,41,365 compared with Rs 1,12,81,595 at the end of the previous year. The decrease is made up with the debits and credits under the following heads:—

Works.  
Tools and Plant.  
Stores.  
Suspense Heads.  
Public Works Department Charges.

Further particulars are shown in Appendix A.

**2. Revenue. Working Expenses.**—A summary of the receipts and expenditure of the year 1888-89 is given in Appendix B. The expenditure in 1888-89 was Rs 9,53,223 against Rs 8,36,856 in the previous year, showing an increase of Rs 1,16,367. Of this increase, Rs 97,275 is accounted for by the following figures, extracted from the Finance Accounts, as explanatory of the chief differences:—

	1887-88.	1888-89.	Increase.	Decrease.
	R	R	R	R
Repairs and renewals of cables . . . . .	40,852	1,49,829	1,08,977	...
Repairs and renewals of Land lines . . . . .	29,275	40,787	11,512	...
Advertising charges in England . . . . .	13,012	11,854	...	1,158
Director-in-Chief and London Office . . . . .	43,048	16,042	A.	27,006
Director General's Tour in Persia and Turkish Arabia. . . . .	...	2,280	2,280	...
Clerks in Director General's Office . . . . .	...	643	643	...
Special appointment of Deputy Examiner to revise accounts. . . . .	...	2,109	2,109	...
Travelling and house allowances of special accounts establishment. . . . .	...	1,595	1,595	...
Subsidies to Beluch Chiefs . . . . .	16,134	19,904	3,770	...
Signalling clerks . . . . .	94,533	97,162	2,629	...
Repairs of <i>Patrick Stewart</i> . . . . .	6,883	12,521	5,638	...
Coals . . . . .	34,555	23,882	...	10,673
Line repairs in Persia . . . . .	27,276	24,235	...	3,041
<b>TOTAL</b> . . . . .	...	...	1,39,153	41,878

**3. Receipts.**—The Receipts amounted to Rs 11,44,600, of which Rs 11,30,310 were derived from message revenue. Compared with the receipts of the previous year, these items show increases of Rs 1,09,363 and Rs 1,50,548 respectively. The increase under the head of message revenue is due to two causes. The receipts of 1887-88 were unusually low owing to the break-down of the cables rented by the Indo-European Company from the German Union Company and the British Post Office, between Emden and Lowestoft, which was noticed in last

\* A summary of the Capital and Revenue Account for the last five years is given in Appendix CC.

year's report; while they were greatly increased in 1888-89 by extra traffic passing over the Indo-European route, owing to the break in the Eastern Company's cable in August and September 1888. On the other hand, the receipts from Local and Terminal messages were less than the receipts from the same source in 1887-88, on account of the termination of the work of the Afghan Boundary Commission, which raised the receipts of 1887-88 to an abnormally high level. These local receipts have now become normal.

4. *Net Revenue*.—If the payment of Rs1,80,270 on account of the deferred annuity to the shareholders of the late Red Sea Telegraph Company be taken into account, the net revenue was only Rs11,107, but if this sum be excluded, and charges appertaining to the Indo-European Telegraph Department alone be considered, there was a credit balance of Rs1,91,377 representing a profit of 172 per cent. on the capital of the Department. In considering the interest earned on the total capital sunk, it should be borne in mind that the capital of the Indo-European Telegraph Department has been appreciated by the charges of the Political Department and the Bombay Marine, incurred on first opening of the route, charges not usually debited to the capital of ordinary Telegraph Administrations. It also bears the burden of Rs1,69,169 on account of the Turkish line, most of which sum is due to the Indian Government having paid the salaries, &c., of the Engineers employed in making the lines from Fao, to Baghdad and Khanikin.

5. *Royalties and Subsidies*.—Again in the Revenue account, before the receipts of the line between Teheran and Bushire are credited to this Department, a sum of Rs48,000 royalty to the Shah of Persia is first deducted and half the balance given as a subsidy to the Indo-European Telegraph Company. There are then further subsidies of krans 30,000 or Rs12,000 to be paid to the Shah of Persia on account of the lines in Persian-Beluchistan and Rs28,280 to the chiefs in Beluchistan, all of which are taxes for the establishment of communication between England and India through foreign territories. Such taxes, not applicable to the Indian Telegraph Department, the whole of which is within British territory, render it impossible for the Indo-European Telegraph Department to pay a percentage on capital at all approaching that paid by the former, from the capital account of which all excess valuation was written off some years ago.

6. *Joint Purse*.—In addition to the subsidy to the Indo-European Company and the royalties paid to Persia and Beluchistan, the Department has for some years been a loser by the Joint Purse Agreement, made in 1878, with the Indo-European and Eastern Telegraph Companies, as is shown by the following table:—

YEAR.	Paid in	Drawn out.	Excess paid in	Excess drawn out.
1878-79	£ 42,300	£ 62,264	£ ...	£ 19,955
1879-80	52,488	68,877	...	16,389
1880-81	57,235	76,122	...	18,887
1881-82	67,108	74,528	...	7,420
1882-83	110,728	84,861	25,867	...
1883-84	81,408	76,547	4,861	...
1884-85	85,376	76,610	8,766	...
1885-86	107,317	85,824	21,493	...
1886-87	80,980	75,206	5,774	...
1887-88	71,808	73,976	...	2,168
1888-89	91,355	77,136	14,219	...
TOTAL	848,112	831,951	80,980	64,819

7. *Division of Traffic*.—The standard proportions, on which the division of the joint purse receipts is made, are based on the following percentages:—

On Indian Traffic	{	Via Suez	60.39%
	{	Via Indo-European Route	39.61%
On Trans-Indian Traffic	{	Via Suez	80.53%
	{	Via Indo-European Route	19.47%

The percentages of traffic actually carried have been—

YEAR.	ON INDIAN TRAFFIC.		ON TRANS-INDIAN TRAFFIC.	
	Via Suez.	Via Indo-European Route.	Via Suez.	Via Indo-European Route.
In 1878-79	71'31%	28'69%	95'26%	4'74%
" 1879-80	67'91%	32'09%	94'10%	5'90%
" 1880-81	69'01%	30'99%	92'50%	7'50%
" 1881-82	64'63%	35'37%	81'26%	18'74%
" 1882-83	48'34%	51'66%	59'26%	40'74%
" 1883-84	55'96%	44'04%	83'52%	16'48%
" 1884-85	53'02%	46'98%	84'44%	15'56%
" 1885-86	52'14%	47'86%	75'91%	25'09%
" 1886-87	55'46%	44'54%	85'32%	14'68%
" 1887-88	60'93%	39'07%	86'48%	13'52%
" 1888-89	51'69%	48'31%	77'04%	22'96%

The division of receipts, since 1878-79, is shown in Appendix C.

#### INTERRUPTIONS.

8. *Total Interruptions.*—The Eastern Company's cables were interrupted for 32 days, from the 11th August to the 11th September 1888, which caused the whole traffic to be diverted by the Indo-European route. The traffic thus diverted amounted to 29,033 messages, which passed through Karachi at an average of 907 a day. For the heavy work thrown on the staff of both the Persian and Persian Gulf Sections, the Government of India sanctioned to the signallers concerned a bonus of Rs. 573-9-4 as a reward for the extra work performed by them.

9. The Indo-European Company's line was totally interrupted for periods aggregating 44 days during the year, the longest interruptions being one on the North Sea cables, which commenced in February 1888 and was restored on the 5th April 1888, two on the Reuter cable, one commencing on the 30th November 1887 and ending on the 18th April 1888, another commencing on the 20th December and ending on the 23rd December 1888, and three during February and March 1889 on the Kertch-Suchum section, lasting 7 days 5 hours 20 minutes, 1 day 21 hours 15 minutes, and 1 day 18 hours 40 minutes respectively. With reference to these three interruptions Mr. Andrews, the Managing Director, supplies an interesting account of the exertions of the staff in restoring communication under the most trying circumstances. The Company has duplicated cables across the Straits of Kerch so as to avoid total interruption to communications by this route; but the winter in South Russia had been unusually severe, and when the ice broke up, it was driven down the rivers and from the Sea of Azoff, through the Straits of Kertch with such force, that it broke both the Company's cables weighing ten tons to the mile, and also the Russian Government cable. Owing to the extensive nature of the damage done, the ice and storms, the work of repairing was one of extreme difficulty; but in spite of all, communication was restored through one cable by the 22nd March 1889, the other two not being finally repaired till the 18th April following. During this interruption the Company, through the indulgence of the Russian Government, was allowed the partial use of the land line which passes round the Sea of Azoff *via* Rostow to Wladikawkas and Tiflis.

10. On the Turkish Route, the interruptions between Western Europe and India aggregated 51 days 17 hours 22 minutes, of which 50 days 2 hours 49 minutes were due to interruptions between Constantinople and Fao. The duration of interruptions on this route for the previous three years compared with those of 1888-89 are—

	D.	H.	M.
1885-86	129	9	1
1886-87	109	9	9
1887-88	59	20	59
1888-89	51	17	22

This improvement in the condition of the lines is to be attributed to the great efforts made by the Turkish Administration to improve the line from Constantinople to Aleppo, from which the Baghdad line branches at Diarbekir. The section from Diarbekir to Mosul is still on wooden posts and it is not anticipated that it will be much improved for the next seven or eight years. From Mosul to Fao the line is in good condition.

11. *Partial Interruptions not stopping Traffic.*—For purposes of the Joint Purse Agreement, an interruption is only taken into account if the traffic is totally interrupted for 24 hours. Consequently a break on one of the three wires between Teheran and Bushire\* or on one of the two cables or on the land lines between Jask and Karachi is considered a partial interruption.

12. On the Persian Gulf Section, the India rubber cable between Jask and Bushire was interrupted for 58 days on account of breaks, repairs and renewals, and the cable between Jask and Karachi for 71 days which, happening during the monsoon, repairs were not possible till the sea subsided; there was also a short interruption in the Bushire-Fao cable, lasting 21 hours, during repairs.

13. On the Mekran Coast lines, there were 14 partial interruptions aggregating 14 days 8 hours and 40 minutes in duration, caused by breaks of the wire, and one of five hours' duration caused by a storm. There was however throughout the year no interruption on the Persian Gulf Section which affected communication with Europe.

14. The partial interruptions in Persia aggregated 631 hours in duration, of which 120 hours were due to wilful damage and 71 hours to camels, while the balance was due to snowstorms and atmospheric causes.

#### TRAFFIC.

15. The Service Regulations and tariffs of the Berlin revision of the International Telegraph Convention of 1885 remained in force throughout the year. The rates between the Gulf and India were, however, increased by one anna per rupee from the 1st July 1888. In Appendices D and G will be found particulars of the traffic and net value of the receipts for the year, and the following table gives a comparative statement of the traffic for three years:—

YEAR.	Messages.	Words.
1886-87 . . . . .	90,733	1,364,192
1887-88 . . . . .	82,540	1,265,849
1888-89 . . . . .	114,991	1,642,079†

16. The fluctuations are accounted for as follows:—

In 1886-87, the Persian Gulf transit rates were reduced, and low press rates introduced, from July 1886. In 1887-88, the Indo-European Company's lines were interrupted in February and March 1888, and in 1888-89, the Suez route was interrupted for 32 days, which accounts for the increase in the number of messages during last year. Allowing, however, for the increase from this cause, the receipts of 1888-89 would still exceed ten lacs of rupees.

17. The paid telegrams and words carried by the Department for the last three years may be classified as below:—

YEAR.	STATE.		COMMERCIAL AND PRIVATE		PRESS AT REDUCED RATES.	
	Telegrams.	Words.	Telegrams.	Words.	Telegrams.	Words.
1886-87 . . . . .	2,916	118,552	84,462	1,124,074	1,355	121,566
1887-88 . . . . .	2,514	90,238	78,850	1,050,757	1,079	52,372
1888-89 . . . . .	2,957	93,093	109,524	1,364,945†	†97	73,282
					2,384	105,587
					†126	78,454

\* Although there are only two international wires, the Persian Government always in cases of necessity gives up the use of its wire.

† Special Press messages to London, for *The Times*.

18. A satisfactory increase is noticeable both in the commercial and private and press messages, while the number of State telegrams remains about the same.

19. The average length of commercial and private messages was 12.5 words, which is about the same as in the previous year. There were also 533 Government and Press messages, valued at Rs 12,507, sent free of charge for Her Britannic Majesty's Ambassador at Teheran, who supplies His Imperial Majesty the Shah with copies.

20. The following table gives the percentage of traffic which has passed over the Teheran and Turkish routes respectively for the last three years:—

	Via Teheran.	Via Turkey.
1886-87	95.47	4.53
1887-88	93.74	6.26
1888-89	94.28	5.72

21. *Speed of Transmission.*—The average speed of transmission from the United Kingdom to Calcutta for the last three years by the three routes was—

	Via Teheran.	Via Turkey.	Via Suez.
	H. M.	H. M.	H. M.
1886-87	1 31	13 23	2 31
1887-88	1 11	16 11	2 42
1888-89	2 24	19 28	3 02

22. The slower average rate during 1888-89 by the Teheran route is due to the extra traffic being thrown on that route, during the break of the Eastern Company's cable during August and September, and to only one circuit being available by the Indo-European route for more than half the time. If the averages of these two months are excluded, the rate becomes 1 hour 14 minutes, or practically the same as last year.

23. Detailed particulars of the rates of transmission are shown in Appendices E and F, between Karachi and Teheran and between the United Kingdom and Karachi. The slow rate of transmission, compared with last year, is due to only one circuit being available at times. Every effort is made to keep up the speed of working, but as the accuracy of transmission is a vital point, it sometimes happens that speed must be sacrificed to obtain accuracy.

24. The speed *via* Turkey continues unsatisfactory and is mainly due to inefficient watching at night.

25. *Check of Errors.*—The total number of words examined for errors was approximately 1,020,703, which resulted in showing that the accuracy of transmission was 99.548 per cent. between Karachi and Teheran. The percentage of errors on the Persian section was 0.182, and on the Persian Gulf section 0.270. Owing to the press of work during the months of August and September, due to the interruption of the Suez route, the messages of those months were not examined.

26. *Rectifying Messages and Public Complaints.*—The total number of complaints of errors, delays and non-delivery of messages, received for investigation and transfer to the other Administrations concerned, was 84. Of these, 54 came from Europe and 30 from India and the far East. In addition to these, there were 30 references on miscellaneous subjects, which brings the gross total up to 114. Of this number, the Indo-European Department was answerable for only 1 delay, 5 errors and 9 non-deliveries, making a total of 15, out of the gross total of 114 complaints of all kinds.

## PERSIAN GULF TELEGRAPHS.

### CABLES.

27. A long interruption on the Gwadar-Karachi Cable, which was simultaneous with the break on the Eastern Company's Cable in August and September 1888, caused an investigation to be made into the general state of the cables which had been laid in 1864. It was found that, in consequence of frequent repairs and renewals of short sections, the cables then consisted of innumerable short lengths of new cable interspersed with the old, and it transpired that, whenever a section of old cable had to be repaired, some portions of new cable were raised and strained in the operation. With the experience in view of the second Bushire-Gwadar Cable, which for want of timely large renewals had to be abandoned and a

new cable laid in 1885, at a cost of Rs 7,67,000 for 519 knots, it was thought better to take advantage of the cable machinery at Manora and the cable establishment, when not required at sea, to make new pieces or put new guards on old core in fairly long lengths, with the view of thoroughly repairing one cable from Bushire to Karachi by renewals of lengths of over 50, instead of under 5, knots at a time. To provide for this scheme, an estimate amounting to Rs 7,03,000 for renewing 740 knots within 3½ years was sanctioned by the Government of India in October 1888.

28. Energetic measures were at once made to carry out this scheme, and including what had been laid from the termination of the monsoon in August, 220 knots of new or new-guarded cable were laid down by the end of the last voyage of the repairing season, which, although the new cable had been made by the end of March, was not concluded until the 24th May.

#### ELECTRICAL CONDITION OF THE CABLES.

29. *Fao-Bushire Section*.—A partial fault not interfering with working existed on this section which was removed in January 1889. Another small fault with so high a resistance that it cannot be accurately localised still exists; but as it does not interfere with working, no attempt will be made to repair it, till the cable steamer next visits Fao for other purposes.

30. *Bushire-Jask Section: New cable*.—This cable was laid in 1885. A minute fault showed itself in December 1885 and has hitherto not been localised. As a cable is invariably damaged each time it is lifted, it is not intended to remove this fault until its position is known exactly. Meanwhile the fault does not affect the working of the cable.

31. *Bushire-Jask Section: Old cable*.—A slight fault was discovered in January 1889. It does not interfere with working and will be removed when the cable ship next visits Bushire.

32. *Jask-Manora Cable*.—The guards of this are so much decayed that it is most difficult to lift it for repairs. Of the new cable which is to be made the greater part will be expended in this section.

33. *Bushire-Jask Gutta Percha Cable of 1864*.—This cable was originally 507 knots long. To the end of 1887-88, 220 knots had been recovered, and during the year under review another 75 knots were brought up.\* It is very much to be regretted that owing to false economy, attempts were not made to pick up the whole of this cable in 1885. Had this been done, in all probability, more core would have been saved for re-making into new cable.

34. *Harbour Cables*.—Owing to the extension of the railway between the Camp and Kiamari, it was necessary to remove Cable Boxes Nos. 2 and 4 and entrench the cables in the same locality. As further railway extensions are contemplated, it is probable that the route of the Harbour Cables between the Karachi Telegraph Office and the Custom House will have to be changed. The Harbour Cables worked without fault or interruption during the year.

#### FAULTS AND INTERRUPTIONS.

35. On the 1st April 1888, there were 4 faults awaiting repair on the cables, and 10 new faults made their appearance during the year. Of these 14 faults, 11 have been removed, and the other 3 will be removed when their positions can be exactly localised. One circuit between Karachi and Bushire was available throughout the year, and the second circuit for 307 days, the India rubber Cable between Jask and Bushire being interrupted for 58 days on account of breaks, renewals and repairs. The cable between Karachi and Jask was interrupted for 71 days, owing to a break off Manora, which could not be repaired owing to high seas and a swell till after the cessation of the South-West Monsoon. During this time the two land lines worked well. It is, however, noteworthy that no total interruption occurred on the Persian Gulf Section affecting communication with Europe. The Bushire-Fao Cable was interrupted for 21 hours for repairs.

Appendix H gives full particulars of faults, renewals and repairs.

\* During the last voyage of the season which terminated in May 1889, 50 knots more, making in all 345 out of the 507, have been recovered. There is no hope of being able to lift any more.

### EXPENDITURE OF CABLE AND CABLE IN STOCK.

36. The total expenditure of cable during the year was 201'231 knots, and the amount of cable in stock on the 1st April 1889 was 58'91 knots. Particulars are given in Appendix I.

37. *Repairs and Renewals.*—During 11 repairs and 5 renewals (see Appendix J) 202 knots of cable were disturbed, of which—

- 28·7 per cent. was too weak to lift.
- 31 per cent. was core which could be used again.
- 39 per cent. was fit for relaying after repair.
- 1'3 per cent. was in short pieces and only fit for sale for fencing purposes.

### CABLE FACTORY.

38. The following is a summary of the work done in the Cable Factory during the past year:—

<i>Cable manufactured—</i>		1888-89.	1887-88.
		Knots.	Knots.
With No. 3 guards, nil			
With No. 7 guards, 32 knots			
With No. 9 guards, 73'13 "		105'13	49'32
<i>Cable repaired and retaped—</i>			
Gutta Percha core, 33'86 knots			
India Rubber core, 29'75 "		63'61	49'89
Stripped for core			
Short pieces of cable repaired and kept for sale		137'30	63'62
		...	7'95
Making total passed through Factory		306'04	170'78

### CABLE STEAMER "PATRICK STEWART."

39. The results of the transfer of the charge of the ship to the Telegraph Department and of her Commander and First Officer being skilled in sub-marine Telegraph cable work continue most satisfactory. A statement of the work done by this steamer is given in Appendix K.

### MEKRAN COAST LINES.

40. The lengths of these lines at the close of the official year were as follows:—

	Miles of line.	Miles of wire.
Karachi to Sonmeanee Branch	48'75	97'50
Sonmeanee Branch	2'00	2'00
Sonmeanee Branch to Ormara	165'75	331'50
Ormara to Pusnee Branch	88'90	177'00
Pusnee Branch	3'25	3'25
Pusnee Branch to Gwadar	76'50	153'0
Gwadar to Charbar	116'00	232'0
Charbar to Jask	201'50	403'00
TOTAL	702'25	1399'25

41. *Maintenance and Repairs.*—The principal improvements during the year consisted of replacing 396 insulators of miscellaneous pattern, on what is known as the right wire, with an equal number of fluid insulators. These have answered well on the left wire, which is fitted throughout with this description of insulator.

Also, four wires of the double line at the Ormara Station have been renewed with hardened copper wire for 2½ miles, on two sets of parallel wooden supports.

42. *Interruptions.*—There was only one interruption affecting both wires, which was caused by a storm and lasted five hours. There were also 14 partial interruptions not affecting communication. These were, with two exceptions,

due to the wire breaking, through corrosion. This wire has now been removed. The following are the details:—

Section.	No. of Interruptions.	Duration.		
		D.	H.	M.
Karachi to Ormara . . . . .	2	2	1	55
Ormara to Gwadur . . . . .	3	0	14	30
Gwadur to Charbar . . . . .	1	0	4	0
Charbar to Jask . . . . .	8	11	12	15
	14	14	8	40

This record compares very favourably with that of the previous year.

### PERSIAN SECTION.

43. *Line Maintenance.*—In December 1888, one of the wires between Bushire and Konar Takhteh was reinsulated for a distance of 40 miles with Johnson and Phillip's fluid insulators, thus rendering a second wire across the *Mascheelah* or salt marsh of Bushire efficient. Various improvements in the alignment have also been made during the year, principally in the neighbourhood of Ispahan, where nearly six miles of line were altered.

44. *Wilful Damage.*—Thirty-eight acts of wilful damage to the lines were recorded for the year, in compensation for which a sum of krans 2,901 was paid by the Persian Government. Of this sum, krans 970 were recovered from the Local Governors of Districts without the aid of Her Britannic Majesty's Legation at Teheran.

The wilful damage account is now closed on the 31st January of each year, in order that the necessary returns may be prepared and the bills be made out for presentation by Her Majesty's Legation on the 13th March, the date on which the "Jask Royalty" becomes due to the Persian Government, from which sum the sums due for damage are deducted.

45. *Interruptions.*—Owing to the severity of the winter of 1888-89, the duration of interruptions has been somewhat greater. The following table is a comparative synopsis of interruptions for three years:—

	1 wire.		2 wires.		3 wires.	
	H.	M.	H.	M.	H.	M.
1886-87	636	56	129	1	59	23
1887-88	342	32	50	32	8	55
1888-89	603	39	27	44	50	46

The principal causes of interruptions are snowstorms; camels, birds and wilful damage. Those attributable to the last cause, lasted 117 hours, 1½ hours and ¼ hour, on one, two, and three wires respectively.

46. *Traffic.*—Traffic was interrupted for 4 hours in October, 8 hours in November, 40 minutes in December 1888, and 46 hours in January 1889. This last was on the occasion of a heavy snowstorm which broke the wires on both sides of Shiraz.

47. Appendix M shows the rate of transmission of messages over the Persian section, and Appendix L is a return of the number of messages and the number of paid words transmitted during the year. The increase of traffic shown by the latter return is due to the break in the Eastern Company's cables and accounts for the longer time taken in transmission, as evidenced in Appendix M.

48. During the interruption of the cables, an average of 820 messages or about 9,324 words passed daily through Teheran, the maximum on any one day being 1,300 messages. To meet this heavy demand, the second international wire was worked day and night from the 26th August to the 16th September, and to provide for this the Persian Telegraph authorities lent their wire for testing and control purposes.



49. *Persian Authorities.*—Friendly relations have been maintained with the Persian Government, the local authorities and with the inhabitants.

At the special request of His Imperial Majesty the Shah, temporary offices were opened for his use at Aliabad and Kôm, during his expedition to Kôm, in April 1888. For this service His Imperial Majesty the Shah conveyed his thanks to the Department through his Prime Minister, His Excellency the Amin-i-Sultan.

In March 1889, His Royal Highness the Ehtesham-ed-Dowleh, a cousin of the Shah, who has recently been promoted to the dignity of Muhtamed-ed-Dowleh, was appointed to the Governorship of Fars. Since his assumption of office, that province, in which there were formerly frequent outbreaks, has been kept in a state of tranquillity, and the present Governor invariably shows that he is favourably disposed towards the staff of the Indo-European Telegraph Department who have to thank him for his friendliness shewn in many ways.

A line, 60 miles in length, was made by Inspector R. McGowan for His Royal Highness the Zil-es-Sultan, K.C.S.I., Governor of Ispahan, from his palace in Ispahan to Kalleh Nazir in the District of Feridan, for which service His Royal Highness expressed his gratitude in the warmest terms. From July to November 1888, the services of Inspector W. Stagno Navarro were lent, at his request, to His Excellency the Mukber-ed-Dowleh, C.I.E., Minister for the Persian Telegraphs, for repairing the Persian line from Shahrud to Astrabad, at a time when, on account of disturbances on the frontier, the re-establishment of telegraphic communication was of great importance to the Persian Government. His Excellency was most grateful for the aid thus rendered him in the emergency.

In February 1889, an application was made by His Excellency the Persian Minister of Telegraphs for stores for constructing a line ordered by His Imperial Majesty the Shah, from Burudjird to Mohammerah, for communication with the River Karun, with the object of facilitating the opening up of the navigation of that river for international commerce. These stores were supplied from India and delivered at Fallahi on the 22nd May 1889. They are to be paid for by a deduction from moneys due on account of message receipts, royalty, &c.

#### MESHED LINE.

50. *Maintenance and Repairs.*—About 1,450 poles and 840 insulators have been renewed on this line during the year. On the section Kishlak to Abdula-bad, 35 miles in length, no less than 250 poles were renewed.

Juniper wood, which gives better insulation and is less liable to be attacked by white ants, is now being used for poles wherever the cost of carriage is not prohibitive. This wood, however, is only obtainable in the mountainous districts north of Semnan, Damghan and Shahrud.

51. *Wifful Damage.*—There were only 34 hours' interruption due to this cause.

52. *Interruptions.*—The duration of the interruptions during the year aggregated 1,102 hours, of which no less than 324 hours was due to the insanity of the Persian clerk stationed at Nishapur, the aberration of whose mind was not suspected to be the cause. A total of 504 hours' interruption is attributable to the inattention of clerks and to damage caused by camels, and 34 hours to mischief.

53. *Expenditure.*—A sum of krans 1772.25 was paid by His Excellency the Mukber-ed-Dowleh on behalf of the Persian Government for the maintenance expenses of this line in addition to the locally made insulators supplied by him. A further sum of krans 12,086 was also received for the payment of the Gholams or Linemen.

The accounts show a probable saving of krans 620.45 or R244 on the Budget Grant of krans 51,009 (R20,000) for this line.

SIMLA;

The 13th November 1889.

## APPENDICES.

## APPENDIX A.

Summary of Expenditure on Capital Account to 31st March 1889.

	CHARGES.			CREDITS.			£	s.	d.
	In India.		In England.	Total.	In India.				
	R.	a. p.	R.	a. p.	R.	a. p.			
Capital Expenditure on 31st March 1888	1,860	15 0	.....	1,860 15 0	.....	.....	128,159	11	9
Capital Expenditure from 1st April 1888 to 31st March 1889—	138	0 0	.....	138 0 0	.....	.....			
	—73,920	0 1	.....	—73,920 0 1	.....	.....			
<i>Persian Gulf Section.</i>									
Works	2,31,342	10 9	1,50,875 2 8	3,82,217 13 5	3,34,935	6 0			
Do. (expenditure by Public Works Department)	19,108	7 0	.....	19,108 7 0	25,456	12 3			
Loss by exchange on English transactions	264	■ 9	.....	264 2 9	264	■ 9			
Suspense Heads—	.....	.....	.....	30,986 14 11	.....	.....			
Stores									
Advances									
Sales									
Balance credited to Capital									
	1,78,794	3 5	1,50,875 2 8	3,60,656 5 0	3,60,656	5 0	—3,098	13	■
TOTAL									
<i>Persian Section.</i>									
Suspense Heads—									
Advances	16,361	10 2	.....	16,361 ■ ■	17,475	15 3			
Balance credited to Capital	.....	.....	.....	1,114 5 1	.....	.....	—111	8	8
	16,361	10 2	.....	17,475 15 3	17,475	15 3			
TOTAL							—3,210	2	6
<i>Deduct—Receipts in England—</i>									
Sale of old cable core returned to England							1,124,949	9	3
							812	16	9
							1,124,135	12	5

F. RAWSON,  
for Examiner of Telegraph Accounts.

## APPENDIX B.

Revenue Account for the year ended 31st March 1889.

To Traffic Earnings, from 1st April 1888 to 31st March 1889—				By Expenditure from 1st April 1888 to 31st March 1889—				£ s. d.	

## APPENDIX C.

## JOINT PURSE\*.

TABLE A.—Division of Receipts.

Year.	INDIAN MESSAGES.						TRANS-INDIAN MESSAGES.						TOTALS.					
	PROPORTIONS FOR			PROPORTIONS FOR			PROPORTIONS FOR			PROPORTIONS FOR			PROPORTIONS FOR			PROPORTIONS FOR		
	Number of words.	Total net value.	Eastern Company.	Indo-European Company.	Indo-European Department.		Number of words.	Total net value.	Eastern Company.	Indo-European Company.	Indo-European Department.		Number of words.	Total net value.	Eastern Company.	Indo-European Company.	Indo-European Department.	
1878-79	1,720,865	310,000 16 2	£ s. d.	£ s. d.	£ s. d.	841,856	117,170 15 7	£ s. d.	£ s. d.	£ s. d.	£ s. d.	2,562,731	437,180 11 9	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
1879-80	1,916,511	337,767 6 8	187,214 18 10	60,245 3 5	53,538 13 11	1,030,604	142,541 14 11	114,667 0 5	94,337 12 6	14,005 13 2	8,717 9 11	2,047,211	480,399 1 7	281,572 11 4	83,351 16 7	62,256 11 10		
1880-81	2,143,516	379,839 8 8	304,101 16 10	75,439 7 7	58,236 2 3	1,043,693	143,776 13 11	115,783 0 8	114,667 0 5	17,206 0 7	10,668 7 11	3,187,211	523,616 1 9	318,858 17 2	92,545 14 2	68,904 10 2		
1881-82	2,012,597	354,007 5 9	221,721 18 1	84,830 3 5	65,196 5 6	1,140,166	155,093 0 8	118,520 6 4	115,783 0 8	21,889 13 3	14,073 10 1	3,152,703	515,104 2 5	345,168 7 2	102,152 8 9	76,205 5 5		
1882-83	2,086,974	354,007 5 9	221,721 18 1	84,830 3 5	65,196 5 6	1,140,166	155,093 0 8	118,520 6 4	115,783 0 8	21,889 13 3	14,073 10 1	3,152,703	515,104 2 5	345,168 7 2	102,152 8 9	76,205 5 5		
1883-84	2,056,841	360,469 16 5	227,086 3 4	88,797 13 1	68,129 9 4	1,156,822	161,035 16 7	119,310 9 1	119,310 9 1	24,949 13 8	16,784 13 10	3,283,709	545,043 2 4	346,390 12 5	100,055 7 4	84,914 3 2		
1884-85	2,030,938	360,469 16 5	227,086 3 4	88,797 13 1	68,129 9 4	1,156,822	161,035 16 7	119,310 9 1	119,310 9 1	24,949 13 8	16,784 13 10	3,283,709	545,043 2 4	346,390 12 5	100,055 7 4	84,914 3 2		
1885-86	2,325,875	404,003 1 4	244,010 9 2	79,430 9 2	61,703 18 11	1,421,111	195,074 2 6	137,057 2 4	140,324 19 11	21,404 12 10	15,393 13 10	3,343,139	544,003 15 9	364,232 10 8	103,181 15 5	79,513 16 11		
1886-87	2,214,048	352,159 11 4	244,010 9 2	79,430 9 2	61,703 18 11	1,421,111	195,074 2 6	137,057 2 4	140,324 19 11	21,404 12 10	15,393 13 10	3,343,139	544,003 15 9	364,232 10 8	103,181 15 5	79,513 16 11		
1887-88	2,407,430	338,324 5 6	212,669 9 4	72,856 18 10	56,201 16 0	1,441,312	193,393 8 5	135,739 14 6	135,739 14 6	23,265 4 8	14,383 9 3	3,477,717	550,443 18 3	375,832 10 8	115,844 6 8	86,012 5 1		
1888-89	2,183,567	335,237 11 4	201,209 16 8	75,793 11 6	58,344 3 2	1,501,066	220,776 39 5	172,737 12 8	172,737 12 8	29,258 5 8	15,781 1 1	3,875,534	551,430 17 10	377,099 8 10	100,310 15 8	74,020 13 4		

TABLE B.—Division of Traffic as actually carried.

Year.	INDIAN MESSAGES.						TRANS-INDIAN MESSAGES.						TOTALS.					
	PROPORTIONS CREDITED BY			PROPORTIONS CREDITED BY			PROPORTIONS CREDITED BY			PROPORTIONS CREDITED BY			PROPORTIONS CREDITED BY			PROPORTIONS CREDITED BY		
	Total net value.	Eastern Company.	Indo-European Company.	Indo-European Department.			Total net value.	Eastern Company.	Indo-European Company.	Indo-European Department.			Total net value.	Eastern Company.	Indo-European Company.	Indo-European Department.		
1878-79	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
1879-80	310,000 16 2	231,062 0 7	48,931 2 0	40,026 13 7	117,170 15 7	117,170 15 7	117,170 15 7	117,170 15 7	117,170 15 7	117,170 15 7	117,170 15 7	117,170 15 7	437,180 11 9	332,679 1 1	52,237 11 4	42,256 11 10		
1880-81	337,767 6 8	229,581 19 1	59,437 16 3	48,047 11 4	142,541 14 11	142,541 14 11	142,541 14 11	142,541 14 11	142,541 14 11	142,541 14 11	142,541 14 11	142,541 14 11	480,399 1 7	363,566 4 9	64,314 18 6	52,439 16 4		
1881-82	379,839 8 8	262,115 19 4	64,967 10 10	52,235 18 6	143,776 13 11	143,776 13 11	143,776 13 11	143,776 13 11	143,776 13 11	143,776 13 11	143,776 13 11	143,776 13 11	523,616 1 9	395,106 4 7	71,274 19 5	57,234 17 9		
1882-83	354,007 5 9	232,689 14 4	71,429 14 11	55,899 6 6	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	515,104 2 5	358,720 4 5	86,276 4 10	57,167 13 3		
1883-84	354,007 5 9	232,689 14 4	71,429 14 11	55,899 6 6	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	155,093 0 8	515,104 2 5	358,720 4 5	86,276 4 10	57,167 13 3		
1884-85	360,469 16 5	206,426 16 6	92,281 15 4	70,171 17 4	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	544,003 15 9	359,704 12 5	155,251 8 2	110,728 1 4		
1885-86	360,469 16 5	206,426 16 6	92,281 15 4	70,171 17 4	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	175,123 16 7	544,003 15 9	359,704 12 5	155,251 8 2	110,728 1 4		
1886-87	404,003 1 4	191,129 15 6	95,655 5 6	73,684 15 5	195,074 2 6	195,074 2 6	195,074 2 6	195,074 2 6	195,074 2 6	195,074 2 6	195,074 2 6	195,074 2 6	544,003 15 9	359,704 12 5	155,251 8 2	110,728 1 4		
1887-88	352,159 11 4	195,405 5 6	87,158 6 11	69,795 18 11	193,393 8 5	193,393 8 5	193,393 8 5	193,393 8 5	193,393 8 5	193,393 8 5	193,393 8 5	193,393 8 5	550,443 18 3	358,499 8 2	133,996 11 1	107,316 19 0		
1888-89	338,324 5 6	200,150 10 10	71,802 8 2	60,371 0 6	213,100 12 4	213,100 12 4	213,100 12 4	213,100 12 4	213,100 12 4	213,100 12 4	213,100 12 4	213,100 12 4	551,430 17 10	394,430 6 11	80,172 8 8	71,868 2 3		

\* Exclusive of the liability of the Indo-European Telegraph Department for interruptions in Turkey under Article 24 of the Joint Purse Agreement.

## APPENDIX CC.

Summary of Capital and Revenue Accounts for five years.

Years.	CAPITAL ACCOUNT.				REVENUE ACCOUNT.						Dividend on Capital.	REMARKS.
	Capital Expenditure during year.	Total capital to end of year.	RECEIPTS.			EXPENDITURE.						
			Persian Gulf Section.		Persian Section.		Total Receipts.	Persian Gulf Section.	Persian Section.	Total working expenses.		
			Message Revenue.	Miscellaneous.	Message Revenue.	Miscellaneous.						
1884-85.	2,31,261	1,12,89,528	8,19,757	2,003	97,302	17,872	9,36,934	4,11,198	2,20,710	6,31,908	27	New Cable Bushire to Jask laid.
1885-86.	10,229	1,12,99,757	8,63,182	3,172	1,47,972	4,958	10,19,284	13,92,360	2,27,714	16,20,074	...	
1886-87.	55,993	1,12,43,764	8,81,875	6,117	1,09,911	5,892	10,03,795	6,39,470	2,26,057	8,65,527	123	
1887-88.	37,831	1,12,81,595	8,70,926	47,126	1,08,835	8,350	10,35,237	5,66,475	2,70,381	8,36,856	175	
1888-89.	40,257	1,12,41,365	9,89,020	7,831	1,41,290	6,459	11,44,600	7,07,929	2,45,294	9,33,223	172	

## APPENDIX D.

## PERSIAN GULF SECTION.

Showing the Net Value of the Traffic received from the Indian, Persian and Turkish Lines, and from Stations of the Section during the year 1888-89.

1888-89.	INDIAN LINES.				PERSIAN LINES.				TURKISH LINES.				STATIONS OF THE PERSIAN GULF SECTION.				GROSS TOTAL.		
	Number of Messages.	Number of Words.	Net Receipts, Persian Gulf Section.	Number of Messages.	Number of Words.	Net Receipts, Persian Gulf Section.	Number of Messages.	Number of Words.	Net Receipts, Persian Gulf Section.	Number of Messages.	Number of Words.	Net Receipts, Persian Gulf Section.	Number of Messages.	Number of Words.	Net Receipts, Persian Gulf Section.	Number of Messages.	Number of Words.	Net Receipts, Persian Gulf Section.	Number of Messages.
April.	3,267	41,075	31,873	2,659	43,615	27,668	301	4,068	3,714	285	3,773	1,286	6,512	93,431	64,542	6,512	93,431	64,542	6,512
May.	3,849	53,325	40,604	3,390	60,574	35,963	233	2,094	1,767	251	3,732	1,330	7,723	119,725	79,726	7,723	119,725	79,726	7,723
June.	4,113	57,465	43,561	3,481	62,541	36,107	259	2,201	1,835	257	3,632	1,403	8,112	125,839	82,907	8,112	125,839	82,907	8,112
July.	3,860	53,248	43,348	3,058	68,405	43,039	227	1,863	1,671	236	3,305	811	7,981	126,881	88,819	7,981	126,881	88,819	7,981
August.	10,337	116,880	90,591	8,160	112,051	77,808	510	4,156	3,935	271	3,057	1,038	19,284	236,144	173,373	19,284	236,144	173,373	19,284
September.	7,855	92,055	72,455	7,235	102,021	72,808	633	4,845	4,611	352	4,272	1,491	16,075	204,095	151,316	16,075	204,095	151,316	16,075
October.	4,115	56,654	46,275	3,927	64,056	44,063	391	3,583	3,432	372	4,432	1,432	8,805	128,725	94,973	8,805	128,725	94,973	8,805
November.	4,403	63,532	52,327	3,917	63,840	45,592	324	2,949	2,019	377	4,569	1,401	9,041	131,893	101,940	9,041	131,893	101,940	9,041
December.	4,119	58,209	48,618	3,767	66,919	45,178	353	3,012	2,666	367	4,024	1,051	8,606	132,384	98,214	8,606	132,384	98,214	8,606
January.	4,574	64,570	53,556	4,161	72,730	49,476	327	2,999	2,703	322	3,539	841	9,384	143,768	106,581	9,384	143,768	106,581	9,384
February.	3,249	43,430	36,027	2,818	59,018	35,238	332	2,757	2,406	278	3,267	924	6,677	100,349	74,597	6,677	100,349	74,597	6,677
March.	3,160	42,464	34,677	2,906	45,674	32,497	349	2,715	2,330	376	5,104	1,189	6,791	93,954	70,694	6,791	93,954	70,694	6,791
Total for the year	56,901	743,895	594,937	50,104	814,276	546,081	4,245	37,142	33,344	3,744	46,766	14,205	114,991	1,642,079	1,187,669	114,991	1,642,079	1,187,669	114,991
Monthly average	4,742	61,991	49,503	4,175	67,857	45,506	354	3,095	2,778	312	3,897	1,183	9,583	136,840	98,972	9,583	136,840	98,972	9,583

G. W. SEALY,  
Offg. Traffic Manager, Persian Gulf Section.

## APPENDIX E.

## PERSIAN GULF SECTION.

Showing the average daily mean-rate of transmission of Messages over the Persian Gulf and Persian Sections to and from Karachi and Teheran during the year 1888-89.

Month.	1888-89.		REMARKS.	1887-88.		REMARKS.
	Karachi to Teheran.	Teheran to Karachi.		Karachi to Teheran.	Teheran to Karachi.	
April . . . . .	Mins. Secs. 11 44	Mins. Secs. 10 37	Working one circuit Gulf Section for 4 days 19 hours. Karachi-Gwadar Section interrupted, working through Land-line 4 days 23 hours and one circuit Persian Section.	Mins. Secs. 9 24	Mins. Secs. 8 53	Gwadar-Jask Section interrupted working through Land-line.
May . . . . .	9 4	8 31		9 6	9 16	
June . . . . .	16 15	9 11		9 19	12 7	
July . . . . .	14 57	20 1		11 34	17 10	
August . . . . .	.....	.....	} Not recorded owing to pressure of work caused by the total interruption of the Eastern Company's lines. Working one circuit Gulf Section for 23 days 21 hours and one circuit Persian Section. Working one circuit Gulf Section for 3 days 7 hours and Persian Land-lines working badly. Working one circuit Gulf Section for 2 days 19 hours and Persian Land-lines working badly. Working one circuit Gulf Section for 5 days 23 hours and Persian Land-lines working badly.	11 5	13 11	Ditto Ditto Ditto Ditto
September . . . . .	.....	.....		8 11	14 03	
October . . . . .	14 33	17 2		8 55	13 14	
November . . . . .	17 1	17 33		10 14	11 55	
December . . . . .	14 6	14 21		21 40	25 35	Persian lines working badly through severe weather.
January . . . . .	18 41	25 55		27 23	14 50	Working one Gulf Section 8th to 27th and Persian lines working badly.
February . . . . .	9 57	9 1		7 35	6 25	
March . . . . .	8 6	5 34		5 59	5 26	
Average monthly mean-rate of transmission per message during the year.	13 26	13 47		11 42	12 40	

G. W. SEALY,  
Offg. Traffic Manager, Persian Gulf Section.

## APPENDIX F.

## PERSIAN GULF SECTION.

Showing the maximum, minimum and mean-rate of transmission from the United Kingdom to Karachi during the year 1888-89, compared with that of the previous year.

MONTH.	UNITED KINGDOM TO KARACHI.										UNITED KINGDOM TO KARACHI.										REMARKS.	
	Via Teheran.					Via Turkey.					Via Teheran.					Via Turkey.						
	Maxi- mum.	Mini- mum.	H. M.	Mean.	Maxi- mum.	Mini- mum.	H. M.	Mean.	Maxi- mum.	Mini- mum.	H. M.	Mean.	Maxi- mum.	Mini- mum.	H. M.	Mean.	Maxi- mum.	Mini- mum.	H. M.	Mean.		
April.	2 14	0 8	0 43	0 36	76 40	5 14	37 54	37 54	76 40	5 14	37 54	37 54	76 40	5 14	37 54	37 54	76 40	5 14	37 54	37 54	Teheran route.	Turkish route.
May.	3 3	0 8	0 36	0 26	99 40	4 21	33 11	33 11	99 40	4 21	33 11	33 11	99 40	4 21	33 11	33 11	99 40	4 21	33 11	33 11		
June.	5 1	0 6	0 40	0 40	33 35	4 22	13 20	13 20	33 35	4 22	13 20	13 20	33 35	4 22	13 20	13 20	33 35	4 22	13 20	13 20		Frequent interruptions Turkish line beyond Fao and Bushrah.
July.	4 55	0 6	0 59	0 59	30 23	2 19	10 50	10 50	30 23	2 19	10 50	10 50	30 23	2 19	10 50	10 50	30 23	2 19	10 50	10 50	Ditto ditto.	Ditto ditto.
August.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10th to 15th working 1 circuit Gulf Section.	
September.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Uwadiar-Jask Section interrupted working through Landlines.	
October.	6 41	0 5	0 55	0 55	47 8	3 23	19 26	19 26	47 8	3 23	19 26	19 26	47 8	3 23	19 26	19 26	47 8	3 23	19 26	19 26	Ditto ditto.	Ditto ditto.
November.	12 42	0 4	1 47	1 47	27 12	2 49	13 53	13 53	27 12	2 49	13 53	13 53	27 12	2 49	13 53	13 53	27 12	2 49	13 53	13 53	Frequent interruptions on the and Division Turkey in Asia.	Frequent interruptions on the and Division Turkey in Asia.
December.	5 51	0 15	1 37	1 37	126 22	2 17	42 15	42 15	126 22	2 17	42 15	42 15	126 22	2 17	42 15	42 15	126 22	2 17	42 15	42 15	Frequent interruptions Fao-Bushrah and on the and Division Turkey in Asia.	Frequent interruptions Fao-Bushrah and on the and Division Turkey in Asia.
January.	7 7	0 10	1 21	1 21	44 04	4 26	15 56	15 56	44 04	4 26	15 56	15 56	44 04	4 26	15 56	15 56	44 04	4 26	15 56	15 56	Persian lines working badly and interruptions Company's lines beyond Oolassa and Emden.	Persian lines working badly and interruptions Company's lines beyond Oolassa and Emden.
February.	6 30	0 9	1 7	1 7	49 50	3 49	12 40	12 40	49 50	3 49	12 40	12 40	49 50	3 49	12 40	12 40	49 50	3 49	12 40	12 40	8th to 17th working one circuit Gulf Section. Interruptions Persian Section and Company's lines beyond Ketchi.	8th to 17th working one circuit Gulf Section. Interruptions Persian Section and Company's lines beyond Ketchi.
March.	2 26	0 6	0 54	0 54	43 51	4 32	13 20	13 20	43 51	4 32	13 20	13 20	43 51	4 32	13 20	13 20	43 51	4 32	13 20	13 20	Interruptions Company's line Fao-Bushrah from 3.55 p. m. to end of watch.	Interruptions Company's line Fao-Bushrah from 3.55 p. m. to end of watch.
Monthly average during the year.	5 39	0 7	1 4	1 4	57 53	3 45	19 28	19 28	57 53	3 45	19 28	19 28	57 53	3 45	19 28	19 28	57 53	3 45	19 28	19 28	Company's line to England inter- rupted during the month.	Company's line to England inter- rupted during the month.

(a) Messages of 31st January passing 1st February.

G. W. SEALY,  
Offg. Traffic Manager, Persian Gulf Section.

## APPENDIX G.

## PERSIAN GULF SECTION.

Showing the number of messages and words, and the percentage of messages received from and forwarded to the Persian and Turkish lines during the year 1888-89, compared with the previous year.

Month.	1888-89.										1889-90.									
	FM TEHERAN.					FM TURKEY.					FM IEHERAN.					FM TURKEY.				
	From.	To.	From.	To.	Total.	From.	To.	From.	Total.	From.	To.	From.	To.	Total.	From.	To.	From.	Total.	From.	Total.
	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.	Mes- sages.	Words.
April	2,850	43,615	3,065	39,543	5,915	83,158	301	4,068	166	2,611	467	6,680	3,454	53,305	158	98,103	107	946	265	2,367
May	3,390	60,574	3,661	51,470	7,051	111,985	333	2,674	122	1,195	355	3,480	3,490	51,224	197	100,038	124	1,468	321	3,349
June	3,485	64,541	3,963	55,753	7,448	118,204	359	2,201	111	1,155	355	3,356	3,081	53,307	203	107,203	126	1,445	311	3,326
July	3,618	68,405	3,738	52,123	7,356	120,528	227	1,863	101	807	328	2,760	3,689	59,175	253	110,923	105	1,037	358	3,596
August	8,160	112,051	10,084	114,301	18,244	226,352	516	4,156	237	2,406	753	6,562	3,122	53,261	271	106,846	118	1,104	389	3,319
September	7,235	107,923	7,185	89,444	14,420	197,367	633	4,835	234	2,404	885	7,249	3,099	53,451	300	106,712	222	1,647	483	4,071
October	3,927	64,296	3,873	54,230	7,800	118,526	391	3,593	172	1,869	565	6,068	3,265	59,020	385	113,782	222	1,470	607	6,401
November	3,937	63,840	4,196	61,550	8,133	125,390	344	2,940	177	1,876	521	4,893	3,607	59,020	334	124,576	170	1,016	504	4,680
December	3,767	66,940	3,934	56,751	7,701	123,700	353	3,012	188	1,876	541	4,229	3,687	65,040	197	127,719	131	1,368	328	3,172
January	4,161	72,230	4,344	62,415	8,505	135,145	327	2,920	143	1,310	470	4,250	4,041	58,426	301	129,723	130	1,315	431	3,953
February	2,818	50,018	3,033	41,405	5,851	92,413	335	2,777	189	1,553	501	4,250	3,793	51,934	338	118,305	125	1,436	413	3,704
March	2,966	45,674	3,973	40,824	5,879	86,498	349	2,715	183	1,432	532	4,447	787	10,372	334	26,410	148	2,423	482	6,145
Total for the year	50,101	814,276	54,449	719,636	104,550	1,533,912	4,245	37,142	2,098	20,804	6,343	57,946	34,296	611,263	3,221	1,764,489	1,691	18,437	4,912	48,802
Percentage vis Tehe- ran	...	...	...	...	94.48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ditto vis Turkey	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

G. W. SEALY,

Offg. Traffic Manager, Persian Gulf Section.

## APPENDIX H.

Statement showing the Faults and Repairs in the Persian Gulf Cables during the official year 1888-89.

No.	REPAIR.	Date.	FAULT.		TOTAL DURATION OF INTERRUPTION.		SECTION.	LOCALITY OF FAULT.		Cause of Fault.	REMARKS.
			No.	Date.	Days.	Hours.		Knots.	From.		
1	May 27th 1888.	February 6th 1888.	3	February 13th "	...	10 1/2	Bushire-Jask India-rubber	149.16	Bushire	Corrosion of guards and chafe.	Partial earth.
2	August 24th "	August 13th "	5	August 9th "	...	...	Ditto	319.94	"	Corrosion of guards	Total Break. Repairing another fault.
3	" 26th "	June 9th "	4	June 26th "	18	23 1/2	Ditto	202.35	"	Ditto	Partial earth till 13th August, then total break.
4	" 29th "	August 26th "	7	August 21st "	...	...	Ditto	216.82	"	Ditto	Repairing other faults.
5	September 1st "	" 4th "	6	January 4th "	61	...	Ditto	99.90	"	Ditto	Total break.
6	" 26th "	" 4th "	2	January 4th "	...	...	Gwadur-Manora	9.50	Manora	Ditto	Ditto
7	October 31st "	September 1st "	8	September 1st "	24	4	Bushire-Jask India-rubber	120.74	Jask	Ditto	Partial earth till July 27th, then total break.
8	November 1st "	October 8th "	9	October 8th "	6	...	Ditto	288.49	Bushire	Ditto	Repairs delayed on account of monsoon swell.
9	December 17th "	November 23rd "	10	November 23rd "	...	...	Jask-Gwadur	5.10	Gwadur	Chafe of Rocks	Partial earth. Interrupted for repair only.
10	January 17th 1889	" 17th 1886.	11	January 17th 1889.	...	21	Fao-Bushire	95.89	Fao	Hole in Percha	Total break. Ship repairing another fault.
11	" 31st "	January 14th 1889.	12	January 17th "	...	10	Bushire-Jask India-rubber	221.87	Bushire	Hole in India-rubber	Partial earth till 12th December, then a total break.
12	" "	" "	13	" "	...	...	Fao-Bushire	...	"	Ditto	Ditto.
13	" "	" 31st "	13	" "	...	...	Bushire-Jask India-rubber	...	"	Ditto	Fault not yet localized owing to its high resistance.
...	...	...	...	...	...	...	Bushire-Jask India-rubber	...	"	Ditto	Fault could not be localized on account of its high and variable resistance.

J. POSSMANN,

Engineer and Electrician, Persian Gulf Section.



## APPENDIX I.

Statement showing Expenditure of Cable during 1888-89 and Quantity on hand on 31st March 1889.

Description.	Balance, 31st March 1888.	RECEIVED SINCE.			TOTAL.		Balance in hand, 31st March 1889.	REMARKS.
		Manufactured at Manora.	Received from England.	Picked up at sea fit for relaying.	Receipts, 1888-89.	Expenditure, 1888-89.		
<b>Gutta-percha—</b>								
Main Cable, 1st class . . .	11'840	32'000	...	22'970	66'810	46'79	20'02	
Shore end . . .	4'829	...	...	...	4'829	4'829	...	
Thin cable, thin core . . .	8'600	...	...	...	8'600	...	8'60	
Ditto thick, 1st class core . . .	40'200	73'130	...	9'610	122'94	116'14	6'80	
Ditto do. 2nd ditto . . .	1'562	...	...	...	1'562	1'562	...	
Main cable, 2nd class . . .	...	...	...	10'000	10'000	...	10'00	
<b>India-rubber—</b>								
Main Cable . . .	3'343	...	...	38'907	42'25	31'91	10'34	
Shore end . . .	3'150	...	...	...	3'15	...	3'15	
<b>TOTAL</b>	<b>73'524</b>	<b>103'130</b>	<b>...</b>	<b>81'487</b>	<b>260'141</b>	<b>201'231</b>	<b>58'91</b>	

J. POSSMANN,

Engineer and Electrician, Persian Gulf Section.

## APPENDIX J.

Statement showing the Renewals in the Persian Gulf Cables during the official year 1888-89 in places where no faults existed.

No.	Commencement of Renewal.	Termination of Renewal.	TOTAL DURATION OF INTERRUPTION CAUSED BY RENEWAL.		Section.	LOCALITY OF RENEWAL KNOTS.			REMARKS.
			Days.	Hours.		From.	To.	From.	
1	May 28th, 1888	June 9th, 1888	4	19	Bushire-Jask Indian Rubber	148'32	154'88	Bushire	Renewal delayed by bad weather.
2	November 23rd, 1888	November 24th, 1888	1	4	Gwadar-Manora	2'40	8'77	Manora	Renewal delayed by bad weather.
3	December 28th, 1888	January 6th, 1889	9	6	Bushire-Jask Indian Rubber	113'30	148'08	Bushire	
4	February 25th, 1889	February 27th, 1889	2	9	Gwadar-Manora	32'90	51'63	Gwadar	
5	March 1st, 1889	March 1st, 1889	...	15½	Jask-Gwadar	16'34	28'33	Gwadar	

J. POSSMANN,

Engineer and Electrician, Persian Gulf Section.

## APPENDIX K.

*Statement of work done by the Telegraph Cable Steamer "Patrick Stewart" during the year 1888-89.*

DATE.		PARTICULARS.
From	To	
1888.	1888.	
April 1 .	April 1 .	At mooring in Karachi harbour.
" 2 .	" 5 .	Left for Bombay, arriving there on the 5th.
" 6 .	" .	In Bombay harbour and dock, undergoing repairs, &c.
May 4 .	May 7 .	Left for Karachi, arriving 7th.
" 8 .	" 16 .	At moorings in Karachi harbour, preparing ship for sea.
" 17 .	" 17 .	Left Karachi to repair fault in Karachi-Gwador Section about 9 miles off Manora, but unable to carry out the repairs owing to heavy sea, returned to Karachi.
" 18 .	" 20 .	At moorings in Karachi harbour.
" 21 .	June 21 .	Left Karachi for all stations, repaired two faults in Jask-Bushire India-rubber cable, also picked up old Gutta-percha in same section, and returned to Karachi.
June 22 .	Aug. 14 .	At moorings in Karachi harbour.
Aug. 15 .	Sept. 12 .	Left Karachi, repaired four faults in the Jask-Bushire Section. On downward voyage repaired the cable on the beach at Gwador.
Sept. 13 .	" 22 .	At moorings in Karachi harbour.
" 23 .	" 26 .	Left Karachi, repaired the fault in Karachi-Gwador Section off Manora, and returned to Karachi.
" 27 .	" 30 .	At moorings in Karachi harbour.
Oct. 1 .	Oct. 4 .	Left for Bombay, arriving there on 4th.
" 5 .	" 12 .	In Bombay harbour and dock, cleaning, painting, &c.
" 12 .	" 15 .	Left for Karachi, arriving on 15th.
" 16 .	" 24 .	At moorings in Karachi harbour.
Oct. 25 .	Nov. 19 .	Left Karachi, repaired two faults in Jask-Bushire Section India-rubber cable, picked up old cable, and returned to Karachi.
Nov. 20 .	" 22 .	At moorings in Karachi harbour.
" 23 .	" 24 .	Left and repaired cable outside of Karachi harbour and returned to Karachi.
" 25 .	Dec. 11 .	At moorings in Karachi harbour.
Dec. 12 .	1889. Jan. 22 .	Left for all stations with reliefs and stores, repaired cable in Gwador west bay, one fault in the India-rubber Jask-Bushire Section, and one in Bushire-Fao Section, and arrived at Busreh.
1889.		
Jan. 23 .	Feb. 8 .	Left Busreh, repaired fault in the India-rubber cable; picked up old Gutta-percha cable and arrived at Karachi after calling at Fao, Bushire, Jask, Charbar, Gwador and Ormara.
1889.	1889.	
Feb. 9 .	Feb. 22 .	At moorings in Karachi harbour.
" 23 .	March 4 .	Left Karachi and repaired one fault in Karachi Gwador cable and one in Gwador-Jask cable and returned to Karachi after calling at Gwador and Ormara.
March 5 .	" 13 .	At moorings in Karachi harbour.
" 12 .	" 15 .	Left for Bombay, arriving there 15th.
" 16 .	" 31 .	In Bombay harbour and dock for painting and repairs.

## ABSTRACT.

	Days.
At moorings in Karachi . . . . .	130
In Bombay harbour or dock . . . . .	52
At sea . . . . .	183

APPENDIX L.  
PERSIAN SECTION.

Statement showing number of Messages (Service and Paid) and Words Paid Transmitted over Teheran-Bushire lines during the year 1888-89 as compared with that of previous year.

1888-89.	NUMBER OF MESSAGES.		REMARKS.	1887-88.	NUMBER OF MESSAGES.		REMARKS.	Number of Words paid only.
	Service.	Paid.			Service.	Paid.		
April 1888	340	5,901		April 1887	385	6,743		98,193
May	354	7,326		May	334	6,845		102,281
June	394	7,678		June	280	7,054		111,944
July	413	7,829		July	341	7,022		112,678
August	858	18,897		August	344	7,371		109,636
September	650	15,631	Eastern Cable interrupted.	September	293	6,924		108,454
October	345	7,873	Ditto.	October	362	7,120		114,697
November	331	8,538		November	345	7,868		126,425
December	507	8,020		December	388	7,380		123,877
January 1889	538	8,837		January 1888	332	7,929		132,693
February	408	6,008		February	81	1,001		17,004
March	584	5,891		March	130	2,252		26,917
TOTAL FOR YEAR	5,722	108,429		TOTAL FOR YEAR	3,615	75,509		1,184,799

Company's Lines interrupted.

APPENDIX M.  
PERSIAN SECTION.

Average rate of transmission of messages in their transit through the lines between Teheran and Bushire for the year 1888-89 as compared with that of the previous year

1888-89.	NUMBER OF MESSAGES.		REMARKS.	1887-88.	NUMBER OF MESSAGES.		REMARKS.
	Service.	Paid.			Service.	Paid.	
April 1888	4	41		April 1887	5	23	
May	4	50		May	6	10	
June	5	18		June	5	21	
July	13	40		July	5	3	
August	25	18		August	4	55	
September	34	59		September	5	8	
October	9	18		October	6	22	
November	16	22		November	8	38	
December	8	7		December	20	57	
January 1889	19	19		January 1888	7	7	
February	5	4		February	2	31	
March	1	55		March	2	49	
Average for year	17	42		Average for year	6	42	

Faulty lines.

## GOVERNMENT OF INDIA.

## REVENUE AND AGRICULTURAL DEPARTMENT.

## Weather Summary for November 1889.

The month of November forms, though less emphatically so than October, one of the autumn transition months during which conditions change from those of the south-west monsoon period to those of the north-east monsoon period. In Northern and Central India the weather is normally fine with a briskly decreasing temperature, while over Bengal and the north of the Bay light north-easterly winds and fine weather alternate with cloudy periods, as the weather in the south of the Bay is disturbed or settled. On the Coromandel Coast the humid north-east winds of the cold weather monsoon ordinarily give heavy rain, while on the western side of the Peninsula, on the contrary, the north-easterly winds are dry and the weather is generally fine. The liability to severe cyclonic storms in the Bay which is so characteristic of the month of October is almost as strongly marked in the early part of November. These storms ordinarily originate over the centre of the Bay and march almost due westward (with very slight northing).

It was explained in the Summary of last month that the south-westerly winds of the south-west monsoon continue to blow during October at the entrance to the Bay and that these humid winds gradually curve round over the centre of the Bay and advance on the Coromandel Coast as north-easterly winds. They there occasion steady rainfall during the second half of October. One of the most important features of the weather of October last was the almost complete failure of this current and this rainfall. The conditions which occasioned this failure were apparently equally operative during the past month of November as a very considerable failure of the Carnatic rainfall is reported, and the winds along the Coromandel Coast, except when disturbed by the cyclonic storm to be afterwards described, were almost continuously north-westerly. The chart of barometric abnormals shows that a peculiar distribution of pressure accompanied this irregularity. At all stations to the west of the meridian of  $80^{\circ}$  (with the exception of part of the Punjab and the North-West Provinces) the mean barometer was abnormally high, and at all stations to the eastward of the meridian of  $80^{\circ}$  it was abnormally low. The greatest excess of pressure was on the west coast, the greatest defect over the Circars, the head of the Bay and part of Bengal. Hence the ordinary barometric gradient was considerably modified and there was no flow of air from the north and centre of the Bay towards the south of the Peninsula. Another irregularity which has been exhibited this month is also probably associated with the abnormally high pressures existing over Western India. As stated above, the storms which are formed over the Bay during this month ordinarily march in an almost due westerly direction. It is, however, unusual for a cyclonic storm to advance directly towards an area of excessive pressure, and it is hence, in all probability, to the existence of abnormally high pressures on the west coast that the very exceptional trajectory of the storm of the 15th to 21st November was due.

**Pressure.**—The returns for the whole of India for the whole month show that, compared with the normal, pressure was low for the time of year by an amount equal to 0.037 inch. The meridian of  $80^{\circ}$  divides the Indian region into two parts, all stations to the west of that line (except parts of the Punjab and North Western Provinces) reporting excessive pressures and all stations to the east reporting defective pressures.

**Temperature.**—The very cool weather which characterised the greater part of October was maintained, though in a modified degree, during the month under review. In Bombay and the Central Provinces indeed the coolness was even greater than in October, but in all other provinces the deficiency, where it existed, was less than in the preceding month, and in the North-Western Provinces and Madras was changed into an excess. The following table shows the

variation of the mean temperature for each week and for the month from the normal mean :—

Province.	DIFFERENCE OF MEAN TEMPERATURE FROM NORMAL FOR WEEK ENDING NOVEMBER					Difference of mean temperature from the normal for the month.
	4th.	11th.	18th.	25th.	2nd De- cember.	
Burma	—0·7	0	—0·8	—0·3	+0·1	0
Bengal	—0·5	+0·6	+2·8	+2·7	+1·0	+1·8
North-Western Provinces	+0·8	—1·2	+2·3	+2·3	+1·4	+1·5
Punjab	+1·3	—2·1	—0·8	—0·7	+0·4	—0·2
Bombay	—2·5	—2·1	—2·2	—1·2	—1·5	—2·0
Central Provinces and Berar	—2·6	—3·8	—1·5	+1·4	+1·1	—1·0
Guzerat and Central India	—1·5	—2·5	—2·3	—0·6	+1·8	—0·9
Sind and Rajputana	—0·7	—3·5	—1·6	—0·6	+1·2	—1·0
Madras	+0·2	—0·7	+1·3	+1·4	—0·4	+0·4

One interesting feature of the temperature of the month has been the frequent occurrence of much lower night temperatures at the plains than at the hill stations. So frequently has this occurred that the mean minimum temperature of the month was  $7\cdot2^{\circ}$  higher at Murree than at Rawalpindi and  $3\cdot8^{\circ}$  higher at Simla than at Lahore. This phenomenon only occurs during clear weather and under anticyclonic conditions; so soon as cyclonic conditions obtain and the air become damp and even very slightly clouded the ordinary temperature relations are re-established. Over the greater part of India the past month has been one of exceptionally large range of temperature, the day readings generally exceeding and the night temperatures falling short of the normal.

*Barometric depressions and cyclonic storms of the month.*—There was only one important cyclonic storm during the month. A series of small depressions were, however, apparently formed over Lower Burma and that neighbourhood which after occasioning some rain round the Gulf of Martaban disappeared, and a second series of small storms appeared over Bengal.

*Important depression of the 13th to 20th November.*—There are certain reasons for supposing that this rather remarkable storm was formed over the Andaman Sea and the east of the Bay. On the 11th, the observations showed a very distinct depression overlying Lower Burma and the neighbouring seas. The winds at the stations in Lower Burma fed into this depression and rain was falling at Diamond Island, Moulmein and Tavoy. On the following day the chart showed that the wind had veered and the barometer risen—changes which would agree with the supposed west-south-west advance of the depression. On the 13th, the barometer was still rising in Burma, while it had fallen over the south-west corner of the Bay, where a depression was shown. On the 14th, the barometer was still rising in Burma and falling in Madras and the depression over the Bay was spreading out. On the morning of the 15th, the barometer was apparently steady over the south of the Bay, while it had risen all over the surrounding land area. Hence the depression over the Bay had increased considerably in definiteness and become a well marked storm. At this period the future movement of the storm was very doubtful, as the only barometric falls reported were very slight decrements at Colombo and Salem, so that what indications there were were in favour of a westerly movement. On the 16th, the observations showed very little change in the storm, but the barometer was falling over the greater part of the Indian region. The greatest fall was at Negapatam, while at Cuttack and False Point the barometer was actually rising, so that the evidence, though very slight, was still in favour of the normal westerly movement. On the 17th the barometer was falling every where, most at Cuddalore and Coimbatore, and the cyclonic storm had become an important depression occasioning strongish cyclonic winds all over the south of the Bay. The lowest barometers were at Cuddalore and Negapatam. Heavy rain was falling along the Coromandel Coast. Between the morning of the 17th and that of the 18th the storm suddenly moved northward and the centre on the latter date lay off Nellore. The disturbance had still further developed and strong cyclonic winds prevailed over the greater part of the Bay. Heavy rain was falling from Vizagapatam south to Madras. The reports of the 19th showed that the storm had continued to move up the Bay and to develop, and

on that day the centre lay off Vizagapatam. Very heavy rain was falling in Ganjam. After 8 A. M. on the 19th the advance of the storm was very slow, and according to the information received in Simla the centre on the morning of the following day lay off the Circars Coast between Vizagapatam and Gopalpore. A severe easterly gale had prevailed at the latter station and very heavy rain continued to fall in Ganjam and Orissa. The lowest barometric reading reported (Vizagapatam 29.614 inch) was 0.018 inch higher than the lowest on the previous day, so that presumably the depression had already begun to fill up. On the 21st the lowest barometer in the upper part of the Bay (29.752 inches) was reported from False Point and the wind, both at that station and Gopalpore, was from the northwestward, so that it appeared as though the centre, while filling up quickly, had passed on to the head of the Bay, but from the Bay of Bengal Chart, the information for which was probably more complete than that for the India report, it appears that the storm passed inland over Orissa as early as between 3 and 5 A. M. on the morning of the 20th when the barometer read about 29.48 inches at Gopalpore and broke up completely in the Orissa hills.

This was the only well defined storm during the month, but it is evident from the varying winds, the unsettled weather and the upsteady barometer in Bengal between the 14th and 19th that that Province was visited by several small local depressions at that time. It has been pointed out above that on the 14th the large depression over the south of the Bay had begun to approach the Madras side of the Bay. This left the east side of the Bay open to an advance, induced by the cyclonic circulation of moist southerly and south-westerly winds from Equatorial regions, and these winds probably travelled right up the Bay and into Bengal where they deposited their moisture and gave rise to the local storms in the lower atmosphere.

**Rainfall.**—The rainfall of the past month has been almost wholly associated with the disturbances mentioned above, that in Madras and the Circars falling during the existence of the large storm of the 13th to the 20th of November, that in Bengal being associated with the local disturbances noticed above.

During the first few days of the month fairly general, though slight, showers occurred in the south of the Indian Peninsula and in Lower Burma. These showers gradually decreased, ceasing altogether in the Peninsula on the 10th, but continuing in Burma. On the 14th rain began around the head of the Bay and in Assam and on the 15th extended southward all over the Carnatic, at the same time becoming heavier in Bengal. On the 16th a similar distribution of rainfall continued, the amounts being still larger in Bengal than elsewhere, but on the 17th rain fell off in Bengal while it extended and became heavier in the south of the Peninsula. As the storm advanced northward up the Bay the area of heaviest rainfall advanced with it, being reported from Vizagapatam on the 18th, from Gopalpore on the 19th and 20th, and from Orissa on the 21st.

The weekly returns of rainfall show that during the week ending on the 18th, *i.e.*, when the heavy rainfall was occurring in Bengal and the cyclonic storm was mainly affecting the Carnatic coast, one station in Deltaic Bengal received 10, a second 8½ and a third 7 inches of rain; while in Central Bengal, Pubna received 8 and two other stations 6½ inches. During the same period the maximum falls were about 4 inches in Orissa and between 5½ and 6 inches in Madras. In the following week, however, when the cyclonic storm was passing along the Circars and Orissa coasts larger amounts were reported. Sompet received 20½ inches; Puri 13 inches; Cuttack 8 inches; Banki 5 inches; and Balasore 3½ inches. The rainfall in Eastern and Deltaic Bengal was still heavy, but was lighter than in the preceding week and much lighter than that in Orissa and Ganjam.

During the period of disturbed weather, which succeeded the breaking up of the depressions, showers fell around the Bay, but the amount and extent of the rainfall gradually decreased, so that by the 30th, the only falls reported were at Rangoon and Tavoy and a local shower at Sibsagar.

The whole of North-Western India, the Gangetic plain, Central India, the Central Provinces and the north and centre of the Peninsula were wholly or practically without rain. The final results of the month's rainfall as shown in the concluding table are a general deficiency, except in Behar, Assam, Lower Bengal, and Orissa and the Circars. The greatest excess was in Lower Bengal where about six times the normal amount fell followed by Orissa and the Circars, where twice the average fell. In the south of the Peninsula, *viz.*, Malabar, Mysore and the Carnatic, there was a large deficiency.

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The following table gives complete data, and shows the actual average rainfall and the normal rainfall of the month of the twenty-one districts into which the country is divided, so far as it is indicated by the telegraphic reports of a few stations in each district :—

DISTRICTS.	Number of Stations.	Normal average rainfall in November.	Actual average rainfall in November 1889.	Difference from the average in November 1889.
Punjab, West . . . . .	7	0'29	0'01	—0'28
„ East . . . . .	4	0'23	■	—0'23
North-Western Provinces, Trans-Gangetic . . . . .	7	0'20	0'10	—0'10
North-Western Provinces, Cis-Gangetic . . . . .	3	0'07	0	—0'07
Behar . . . . .	2	0'35	0'41	+0'06
North Bengal . . . . .	3	0'21	0'05	—0'16
Assam—Cachar . . . . .	3	0'73	1'29	+0'56
Lower Bengal and Chutia Nagpur . . . . .	8	0'69	4'13	+3'44
Orissa—North Circars . . . . .	5	4'76	9'75	+4'99
Central Provinces, South . . . . .	7	0'51	0	—0'51
Berar, Khandeish . . . . .	2	0'73	0	—0'73
Rajputana, Central India, Saugor and Nurbudda . . . . .	9	0'20	0	—0'20
Sind—Cutch . . . . .	3	0'02	0	—0'02
Guzerat . . . . .	3	0'20	0	—0'20
Konkan . . . . .	4	0'81	0'04	—0'77
Deccan—Hyderabad . . . . .	5	1'38	0'29	—1'09
Malabar . . . . .	5	4'64	1'96	—2'68
Mysore—Bellary . . . . .	4	4'97	1'76	—3'21
Carnatic . . . . .	6	9'08	2'81	—6'27
Lower Burma . . . . .	7	4'41	2'49	—1'92
Ceylon . . . . .	1	13'33	10'70	—2'63

W. L. DALLAS,

for Meteorological Reporter to the Govt. of India.

SIMLA,

The 19th December 1889.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weather Review of India for the week ending at 8 a.m. on Monday, December 16th, 1889.

The weather reports of the past seven days show that the exceptionally settled weather, which has now prevailed over India for a considerable period, has continued. The barometer has been steadily high over North-Western and Central India and steadily low over the south of the Bay. The winds, which have prevailed, have been mainly anti-cyclonic, radiating out from the high pressure area and have consequently been dry so that the rainfall has been practically nil throughout the whole of India. Over the south of the Bay conditions have probably been unsettled, but the unsettled area has been so far south that its effects have not been felt in any part of India, though the variations in the wind direction at Colombo and the rain which has fallen there, show that immediately to the south cyclonic conditions have prevailed.

The chart of the 10th showed that the high pressure area overlay Central India where the barometer marked over 30'06". From this region pressure decreased slowly in a south-easterly direction and was lowest over the Andaman Sea and the south of the Bay. In the Punjab and Upper Sind the barometer had fallen rapidly and irregular cyclonic winds prevailed in this region. In other

parts of India anti-cyclonic winds were reported radiating out from the high pressure area in Central India. In parts of Lower Burma, however, the wind was easterly and at Colombo north-easterly. The chart of the following day showed that the relatively low pressures, reported from the west of the Punjab and Upper Sind had disappeared and readings were as high there as in Central India. There was no important change in the winds. On the 12th the barometer was rising everywhere, but the amount of increase was fairly uniform, and the relative distribution was unaltered. The wind directions were unchanged. On the 13th the barometer was falling except in Bombay and the Deccan. The fall was greatest in the North-West and the high pressure area in that neighbourhood had disappeared. Readings now decreased from 30.10" and above, over Central India and the Deccan, to 29.90" and below, to the east of Ceylon. Calms and light variable breezes prevailed in the North-West as well as within the high pressure area noticed above, but elsewhere the wind currents were unaltered. The chart of the following day showed no change of importance, but on the 15th there had occurred a considerable extension of the high pressure area which covered the Punjab, Rajputana, the North-Western Provinces, Behar, the Central Provinces and the Deccan. The only important feature in the winds was the strengthening of the current at Diamond Island. On the 16th there was little or no change in the position, &c., of the high pressure area, but the barometer had fallen over the Bay and the gradient had increased somewhat. The wind had continued to strengthen at Diamond Island and was rising on the Madras Coast hence it appeared probable that a disturbance was forming over the Bay.

*Temperature.*—Taken as a whole, the temperature of the air over India during the past week has been low. The greatest general deficiency was on the 14th after which date the amount of the depression decreased, and at the close of the week was very slight indeed. The Punjab was, relatively to the average, the warmest province, the mean temperature of five out of the seven days exceeding the average; in Burma three days, in Sind and Rajputana two days, and in the North-Western Provinces, Central India and Madras one day were warmer than the normal. In the remaining Provinces the week was relatively cool throughout.

The following table shows the variations of the mean temperature of the present and of the past weeks from the normal average :—

PROVINCES.	Difference of mean temperature of last week from normal.	Difference of mean temperature of present week from normal.
Burma	+0.7	—0.2
Bengal	+0.6	—1.1
North-Western Provinces	+1.5	—1.0
Punjab	+0.8	+0.5
Bombay	—0.3	—2.1
Central Provinces	+2.9	—1.7
Guzerat and Central India	+1.6	—1.1
Sind and Rajputana	—1.3	—0.2
Madras	+1.2	—1.6

This table shows a considerable fall of temperature relatively to the average in nearly all provinces. In Sind and Rajputana, however, there has been a slight rise and in the Punjab the fall is trifling.

*Rain.*—As mentioned above the week has been practically rainless throughout the whole of India. The two Assamese divisions report slight showers, and a few drops of rain fell at Tavoy on the 15th, but with these exceptions there has been no rain in any part of the country.

The second columns of the concluding table shows that except, in the south of the Peninsula, the normal rainfall of the week is very light, but that, except in Tenasserim and the east of the North-Western Provinces, showers are ordinarily experienced in all parts of the country.

The final column of the table shows the large seasonal deficiency which exists in North-Western India and the south of the Peninsula.



**SUPPLEMENT TO THE GAZETTE OF INDIA, DECEMBER 28, 1889. 1403**

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING 15TH DECEMBER 1889.			RAINFALL DATA FROM 15TH OCTOBER TO 15TH DECEMBER 1889.		
		Average actual rainfall of Division.	Average normal rainfall of Division.	Excess, or defect in inches.	Average actual rainfall of season to date.	Average normal rainfall, 15th Oc- tober to 15th De- cember.	Excess or defect of (seasonal) rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMA.	Tenasserim . . . . .	0	■	0	16.78	5.02	+ 234
	Lower Burma . . . . .	0	0.04	-0.04	7.42	5.97	+ 24
	Central do. . . . .	0	0.03	-0.03	6.06	4.11	+ 47
	Upper do. . . . .	0	?	?	3.62	?	?
	Arakan . . . . .	0	0.28	-0.28	7.39	5.69	+ 30
BENGAL AND ASSAM.	Eastern Bengal . . . . .	0	0.05	-0.05	7.33	4.07	+ 80
	Assam (Surma) . . . . .	0.02	0.18	-0.16	4.59	3.77	+ 21
	Do. (Brahmaputra) . . . . .	0.03	0.24	-0.21	1.44	2.88	- 50
	Deltaic Bengal . . . . .	0	0.05	-0.05	9.52	3.03	+ 214
	Central do. . . . .	0	0.03	-0.03	3.57	2.46	+ 45
	North do. . . . .	0	0.09	-0.09	0.69	2.52	- 77
	Orissa . . . . .	0	0.22	-0.22	15.44	5.71	+ 170
	Chutia Nagpur . . . . .	0	0.10	-0.10	2.99	1.83	+ 63
	Behar (South) . . . . .	0	0.11	-0.11	0.54	1.62	- 67
	Do. (North) . . . . .	■	0.05	-0.05	0.42	1.36	- 69
NORTH-WESTERN PROVINCES AND ODDH.	North-Western Provinces (East) . . . . .	■	0	0	1.23	0.89	+ 38
	Oudh (South) . . . . .	0	0.05	-0.05	0.05	0.43	- 88
	Do. (North) . . . . .	0	0.13	-0.13	0.04	0.34	- 88
	North-Western Provinces (Central) . . . . .	0	0.03	-0.03	0.01	0.42	- 98
	North-Western Provinces (West) . . . . .	■	0.07	-0.07	0	0.20	-100
	North-Western Provinces (Submontane) . . . . .	■	0.12	-0.12	0.14	0.51	- 73
PUNJAB.	Punjab (South) . . . . .	0	0.07	-0.07	■	0.27	-100
	Do. (Central) . . . . .	0	0.07	-0.07	■	0.35	-100
	Do. (Submontane) . . . . .	0	0.24	-0.24	0	0.61	-100
	Do. (Hill Districts) . . . . .	0	0.43	-0.43	0	1.20	-100
	Do. (North-west) . . . . .	0	0.18	-0.18	0.02	1.15	- 99
	Do. (West) . . . . .	0	0.04	-0.04	0	0.27	-100
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar . . . . .	0	0.42	-0.42	10.66	11.10	- 4
	Madras (South Central) . . . . .	■	0.63	-0.63	4.86	11.38	- 58
	Coorg . . . . .	0	0.38	-0.38	11.76	2.74	+ 35
	Mysore . . . . .	0	0.22	-0.22	2.10	4.16	- 50
	Konkan . . . . .	0	0.02	-0.02	11.90	2.01	+ 147
	Bombay Deccan . . . . .	0	0.16	-0.16	5.10	3.60	+ 42
	Hyderabad (North) . . . . .	■	■	■	■	■	■
	Khandesh . . . . .	0	0.04	-0.04	1.26	2.76	- 54
CENTRAL PROVIN- CES AND BERAR.	Berar . . . . .	■	0.21	-0.21	3.14	2.45	+ 28
	Central Provinces (West) . . . . .	0	0.13	-0.13	2.95	1.29	+ 129
	Do. (Central) . . . . .	0	0.08	-0.08	1.72	1.48	+ 46
	Do. (East) . . . . .	0	0.09	-0.09	1.97	1.23	+ 60
BOMBAY (NORTH)	Guzerat . . . . .	0	0.02	-0.02	0.02	0.52	- 96
	Kattiawar . . . . .	0	0.02	-0.02	0	0.28	-100
	Sind . . . . .	0	0.01	-0.01	0.01	0.11	- 90
RAJPUTANA AND CENTRAL INDIA.	Central India (East) . . . . .	0	0.13	-0.13	0.13	0.84	- 85
	Rajputana (East), Central India (West) . . . . .	0	0.08	-0.08	■	0.40	-100
	Rajputana (West) . . . . .	0	0.01	-0.01	0	0.14	-100
MADRAS.	East Coast (North) . . . . .	0	0.33	-0.33	12.36	8.78	+ 41
	Do. (North)(s) . . . . .	0	?	?	8.90	?	?
	Hyderabad (South) . . . . .	0	0.08	-0.08	2.46	3.00	- 18
	Madras (Central) . . . . .	0	0.14	-0.14	4.56	4.45	+ 2
	East Coast (Central) . . . . .	0	0.53	-0.53	8.75	14.15	- 38
	Do. (South) . . . . .	0	1.13	-1.13	5.35	15.67	- 40
	Madras (South) . . . . .	0	0.70	-0.70	3.65	12.30	- 70

W. L. DALLAS,

*Assistant Meteorological Reporter to the  
Government of India.*

SIMLA, 19th December, 1889.

E. G. BUCK,

*Secretary to the Government of India.*

GOVERNMENT OF INDIA.  
REVENUE AND AGRICULTURAL DEPARTMENT.

### Weekly Report on the State of the Season and Prospects of the Crops.

**Madras.**—*For week ending 21st December.*—No rain in the northern districts of Bellary, Anantapur, and Kurnool; moderate in Coimbatore, South Canara and Malabar; good elsewhere. Crops greatly benefited and improving after the recent rains, but more rain is still wanted in Nellore and many of the southern districts. Paddy blighted in parts of Cuddapah, South Arcot and South Canara. Prices falling in Ganjam, Nellore, Madras, Chingleput, Trichinopoly, Madura, Tinnevely and Salem, rising or stationary elsewhere. General prospects much improved.

**Bombay.**—*For week ending 24th December.*—Standing crops need rain in parts of the Deccan and Karnatak, otherwise generally good. Cotton prospects favourable, except in parts of Broach. Opium sowing in Baroda and harvesting and sowing operations generally progressing. Fodder generally sufficient and agricultural stock healthy.

**Bengal.**—*For week ending 24th December.*—No rain fell during the week. The winter rice crop is being cut and gathered. In most districts an average or nearly an average, and in some more than an average, crop will be obtained. In parts of Western and Central Bengal, the Sudder Sub-Division of Balasore, and the Palamow Sub-Division of Lohardugga, the outturn will be short. *Rabi* crops are generally reported on well, but in Behar a shower of rain now would do much good. Poppy is doing well, and the weather is very favourable for the cultivation. Sugarcane good, except in Pubna, Dacca and Furreedpore. Tobacco a promising crop, as also *ganja* in the Rajshahye district. The appearance of new rice in the market has had the effect of lowering prices in Bengal, Behar and Chota Nagpore generally. In Balasore and Cuttack the price of common rice was steady during the week.

**North-Western Provinces and Oudh.**—*For week ending 25th December.*—Weather clear and cold. *Rabi* crops generally thriving. Rain much wanted in unirrigated areas. Food stocks ample. Prices fairly easy.

**Punjab.**—*For week ending 25th December.*—No rain. Prices rising in Rawalpindi and Shahpur and stationary elsewhere. Sowing of *rabi* crops nearly completed; rain is much needed for further sowings and for the standing crops. Prospects of standing crops good for the present. Fodder sufficient throughout the Province. Poppy sowing in progress in Jullundur.

**Central Provinces.**—*For week ending 25th December.*—Weather cool and slightly cloudy at times. *Kharif* crops being harvested, outturn good. *Rabi* crops in good condition. A little rain would be beneficial to wheat and gram, especially in the Narbada District. Prices steady.

**Burma.**—*For week ending 21st December.*—The crop prospect throughout Lower Burma is good. In Upper Burma crops for the most part promise well. The price of paddy has fallen in Bassein, Tavoy, Katha and Yamethin, but it has risen in Bhamo; elsewhere prices are stationary.

**Assam.**—*For week ending 25th December.*—Weather seasonable. Harvesting of cold weather rice continues. Prospects of tea and other crops good.

**Mysore and Coorg.**—*For week ending 25th December.*—Slight rain in the Civil and Military Station and in the Bangalore and Hassan districts. Crops generally in good condition; outturn fair. Prospects favourable, but more rain required in the Bangalore district. No material change in prices.

Rainfall '97 inch in Coorg. Coffee picking and rice harvest in progress.

**Berar and Hyderabad.**—*For week ending 25th December.*—In Berar the weather is clear and cold. *Jowari* reaping and cotton picking still continues. *Rabi* crops good. Cattle healthy. Fodder sufficient. Prices almost stationary.

No rain in Hyderabad during week. Harvesting of *abi* crops concluded. *Rabi* crops thriving. Prices stationary.

**Central India.**—*For week ending 25th December.*—Condition of crops in Bhopal fair. Rain wanted to improve them. Agricultural stock indifferent. No other material changes during week.

**Rajputana.**—*For week ending 25th December.*—Agricultural operations satisfactory. Standing crops good but somewhat damaged by locusts in a few districts of Marwar. Cotton cultivation injured by cold in Kerowli. Agricultural stock generally good. Pasturage or fodder generally sufficient but dear in Marwar. Prices steady generally.

**Nepal.**—*For week ending 19th December.*—No rain. Weather cold; mornings foggy. Winter crops thriving.

E. C. BUCK,  
*Secretary to the Government of India.*



GOVERNMENT OF INDIA.  
PUBLIC WORKS DEPARTMENT.  
RAILWAY TRAFFIC.

No. XXXV. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used, as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 1ST DECEMBER, 1888.			WEEK ENDING 30TH NOVEMBER, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 1ST DECEMBER, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 30TH NOVEMBER, 1889.		Total Increase in 1889-90.
		Total length open.	RECEIPTS.		Total length open.	RECEIPTS.		Total.	Per mile open per week.	Total.	Per mile open per week.	
			Total.	Per mile open.		Total.	Per mile open.					
	<i>State Lines worked by Companies</i>		R	R		R	R		R	R		R
7th Dec., 1889	East Indian	1,514	9,74,948	644	1,526	(a) 9,06,570	594	2,85,51,194	537	(a) 2,84,99,688	524	...
7th ditto	Patna-Gya	57	7,443	131	57	8,989	158	3,32,730	106	3,27,716	164	...
...	Dildarnagar-Chazipur	12	732	61	...	(b) ...	...	42,346	101	(b) ...	...	...
...	Sindia	75	6,277	84	...	(c) ...	...	2,36,829	90	(c) ...	...	...
7th Dec., 1889	Rajputana-Malwa	1,064	3,36,034	202	1,072	3,87,000	231	1,19,47,026	205	1,26,08,674	217	6,61,648
7th ditto	Bengal-Nagpur (d)	183	24,260	133	305	(e) 32,494	107	9,39,529	145	(e) 11,45,136	109	2,05,607
7th ditto	Southern Mahratta (f)	854	72,853	85	978	70,957	73	26,25,078	88	26,84,428	87	59,350
7th ditto	Ditto Mysore Section	140	41,407	81	296	19,800	67	3,96,877	81	6,37,119	72	2,40,242
7th ditto	Indian Midland	136	11,278	83	746	(g) 77,803	104	4,35,577	92	(g) 19,74,644	83	15,36,067
30th Nov., 1889	Vilupuram-Guntakal	83	4,162	50	83	4,592	55	1,66,079	57	1,66,026	57	...
30th ditto	Nellore Branch	36	2,037	57	36	2,421	67	55,673	45	68,338	50	12,685
	<b>TOTAL</b>	4,754	14,54,431	305	5,699	15,10,706	265	4,57,31,944	275	4,81,11,789	251	23,79,845
	<i>State Lines worked by Government.</i>											
7th Dec., 1889	North-Western (A)	2,411	4,92,145	204	2,477	5,86,214	237	1,69,78,113	201	1,85,28,791	215	15,50,678
30th Nov., 1889	Oudh and Rohilkhand	692	1,19,709	173	692	1,53,591	222	44,97,037	186	49,89,644	206	4,92,537
7th D., 1889	Bengal Central	125	12,609	101	125	14,650	117	4,89,839	112	5,10,002	117	20,063
7th ditto	Wardha Coal	45	20,095	446	45	15,586	346	5,27,345	335	5,19,539	332	...
7th ditto	Eastern Bengal	673	2,53,052	376	747	3,11,340	417	71,52,625	394	74,38,982	295	2,86,357
7th ditto	Nalhati	27	2,242	83	27	1,839	70	67,188	72	64,453	70	...
7th ditto	Tirhoot	273	34,285	120	273	45,567	107	11,01,402	123	12,82,885	138	1,81,483
30th Nov., 1889	Lucknow-Sitapur-Sihramau	105	4,182	40	103	7,002	67	1,67,124	45	2,10,555	57	43,431
30th ditto	Jorhat	...	...	...	...	(i) ...	...	(f) 39,922	38	(f) 40,167	47	245
7th Dec., 1889	Cherra-Companyganj	7	262	37	7	357	51	5,415	22	6,920	28	1,514
30th Nov., 1889	Dumrao (j)	...	...	...	...	80,205	182	10,92,186	140	10,28,428	162	10,66,242
	<b>TOTAL</b>	4,799	10,02,503	209	5,051	12,25,911	243	3,29,88,346	197	3,66,20,375	208	36,32,029
	<i>Lines worked by Guaranteed Companies.</i>											
30th Nov., 1889	Madras	840	1,69,618	202	840	2,08,556	248	56,97,775	194	62,21,854	218	5,24,079
30th ditto	South Indian	654	92,402	140	654	1,04,552	160	37,11,216	162	38,82,512	170	1,71,296
30th ditto	Great Indian Peninsula	1,504	(m) 8,13,397	541	1,447	(n) 8,67,547	600	22,66,52,580	508	22,14,25,439	426	...
7th Dec., 1889	Hombay, Baroda and Central India (o)	461	2,55,102	553	461	2,65,000	525	81,00,323	502	83,08,518	517	2,08,195
	<b>TOTAL</b>	3,459	13,35,519	386	3,402	14,45,653	415	4,41,61,894	365	3,98,23,323	336	...
<b>GRAND TOTAL (GUARANTEED AND STATE)</b>		16,012	37,89,453	291	14,152	41,82,272	296	12,28,82,184	370	12,45,70,487	256	16,88,393
<b>GROSS ESTIMATED EXPENSES</b>		...	...	...	...	...	...	6,41,57,486	141	6,34,79,942	134	10,21,450
<b>NET RECEIPTS</b>		...	...	...	...	...	...	5,87,24,698	129	5,93,91,545	122	6,66,947
	<i>Assisted Companies</i>											
7th Dec., 1889	Tarakeshwar	22	5,033	228	22	5,288	240	1,88,401	245	1,82,829	238	...
30th Nov., 1889	Dibru-Sadiya	78	8,046	103	78	8,812	113	2,98,913	109	3,20,891	118	21,078
7th Dec., 1889	Bengal and North-Western	376	35,559	95	376	35,710	95	15,14,922	115	15,65,886	110	50,964
30th Nov., 1889	Rohilkhand-Kumaon	67	4,711	70	67	6,174	92	2,50,736	110	2,77,193	122	26,457
	<b>TOTAL</b>	543	53,339	98	543	55,984	103	22,52,972	119	23,46,799	124	93,827
	<i>Native States.</i>											
7th Dec., 1889	His Highness the Nizam's Guaranteed	310	36,947	119	354	45,186	128	11,24,113	110	15,35,428	125	4,14,315
7th ditto	His Highness the Gaekwar's	59	3,123	53	59	2,640	45	89,811	43	88,851	43	...
7th ditto	His Highness the Gaekwar's Viramgam	21	859	41	27	850	31	30,069	41	34,682	37	4,620
7th ditto	Mehsana-Vadnagar	21	859	41	27	850	31	30,069	41	34,682	37	4,620
7th ditto	Bhavanagar-Gondal	209	32,042	153	329	25,403	77	6,81,310	98	8,53,802	88	1,72,492
7th ditto	Junagadh-Porbandar	68	3,571	53	68	3,405	44	1,15,333	48	1,24,877	52	9,524
7th ditto	Morvi	124	5,370	43	124	6,100	49	2,29,402	53	2,26,588	52	...
7th ditto	Jodhpore	...	...	...	...	...	...	...	...	...	...	...
	<b>TOTAL</b>	791	81,912	104	961	83,184	87	27,70,058	85	28,67,235	90	5,97,177

- a) Includes the Dildarnagar-Chazipur State Railway.  
 (b) Included with East Indian Railway.  
 (c) Included with Indian Midland Railway.  
 (d) Includes the Katni-Umaria Branch.  
 (e) Includes the Santoria Coal Section of the Bengal-Nagpur Railway.  
 (f) Includes the Bellary-Kistna State Railway.  
 (g) Includes the Sindia and Bhopal Itarsi State Railways.  
 (h) Includes the Amritsar-Pathankot and Patna-Bhadrinda State Railways.

- (i) Return not received.  
 (j) Total receipts from 1st April to 24th November 1888.  
 (k) Total receipts from 1st April to 23rd November 1889.  
 (l) Includes the Toungou-Mandalay extension.  
 (m) Includes the Dhond-Manmad, Khargnau, Amraoti and Bho State Railways.  
 (n) Includes the Dhond-Manmad, Khargnau and Amraoti State Railways.  
 (o) Includes the Patli Branch.

M. C. BRACKENBURY, Major, R.E.  
Under-Secretary.

CALCUTTA,  
The 27th December, 1889.

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